

**LAB MANUAL**

**MOBILE  
APPLICATION**

**DEVELOPMENT  
LAB**

# Practical No. 1

Create "Hello World" application to display "Hello World" in the middle of the screen in red colour with white background.

XML File :

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="#EBECEB"
    android:textAlignment="center"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_above="@+id/practical1"

        android:layout_alignParentEnd="true"

        android:layout_marginTop="78dp"
        android:layout_marginEnd="59dp"
        android:layout_marginBottom="120dp"

        android:paddingLeft="3dp"
        android:paddingTop="10dp"
        android:paddingEnd="10dp"
        android:paddingRight="3dp"
        android:text="Crate Hello world application.. "
        android:textColor="#050505"
        android:textSize="20dp"
        android:textStyle="bold" />

    <TextView
        android:id="@+id/practical1index"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_above="@+id/practical1"

        android:layout_alignParentEnd="true"
        android:layout_marginEnd="160dp"

        android:layout_marginBottom="244dp"
        android:background="@color/white"
        android:paddingLeft="3dp"
        android:paddingTop="5dp"
        android:paddingRight="3dp"
        android:text="Practical 1"
        android:textColor="#535252"
        android:textSize="20dp"
        android:textStyle="bold" />
</RelativeLayout>
```

```

<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="122dp"
    android:layout_marginBottom="189dp"
    android:onClick="practical2"
    android:text="back to index" />

<EditText
    android:id="@+id/editTextTextPersonName3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_centerInParent="true"
    android:ems="10"
    android:inputType="textPersonName"
    android:text="Hello World "
    android:textColor="#A31212" />

" />

```

```
</RelativeLayout>
```

## Java File :

```

package com.example.practicalbook;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;

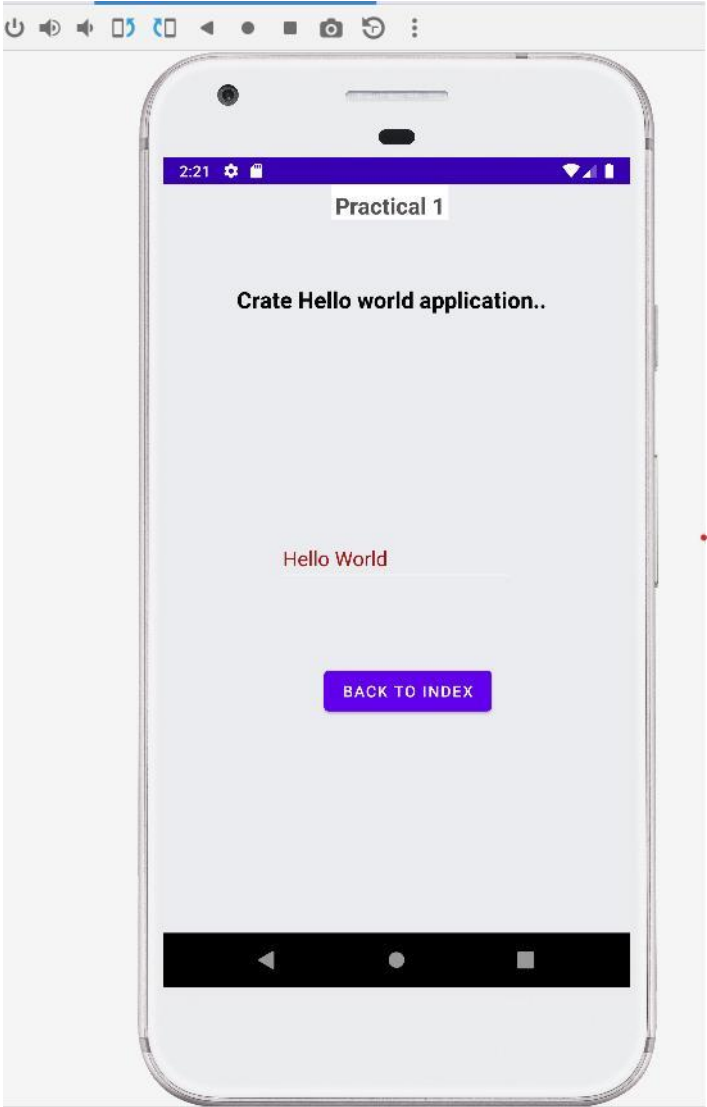
public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }

    public void practical2(View view) {
        Intent intent = new Intent(this, index.class);
        startActivity(intent);
    }
}

```

**Output :**



## Practical No. 2

Create sample application with login module. (Check username and password), validate it for login screen or alert the user with a Toast.

XML File :

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/background"

    tools:context=".practical2">

    <TextView
        android:id="@+id/practical1index"
        android:layout_width="wrap_content"
        android:layout_height="44dp"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="10dp"
        android:layout_marginEnd="166dp"
        android:layout_marginBottom="244dp"
        android:background="@color/white"
        android:paddingLeft="3dp"
        android:paddingTop="10dp"
        android:paddingRight="3dp"
        android:text=" Practical 2 "
        android:textColor="#535252"
        android:textSize="18dp"
        android:textStyle="bold" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="78dp"
        android:layout_marginEnd="83dp"
        android:layout_marginBottom="120dp"
        android:paddingLeft="3dp"
        android:paddingEnd="10dp"
        android:paddingRight="3dp"
        android:text="Enter the Username,Email,Password"
        android:textSize="15dp"
        android:textStyle="bold" />

    <LinearLayout
        android:layout_width="394dp"
        android:layout_height="256dp"
        android:layout_alignParentStart="true"
        android:layout_alignParentTop="true"
        android:layout_marginStart="10dp"
        android:layout_marginTop="135dp"
```

```
android:layout_marginEnd="10dp"
android:background="@color/teal_200"
android:gravity="center"
android:orientation="vertical">
```

```
<EditText
    android:id="@+id/PersonName"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:layout_marginStart="10dp"
    android:layout_marginTop="5dp"
    android:layout_marginEnd="10dp"
    android:ems="10"
    android:hint="enter the username"
    android:inputType="textPersonName"
    android:minHeight="48dp"
    android:padding="5dp"
/>
```

```
<EditText
    android:id="@+id/Personemailid"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginStart="10dp"
    android:layout_marginTop="5dp"
    android:layout_marginEnd="10dp"
    android:ems="10"
    android:hint="enter the email"
    android:inputType="textPersonName"
    android:minHeight="48dp"
    android:padding="5dp"
    android:paddingLeft="5dp"
    android:paddingTop="5dp"
/>
```

```
<EditText
    android:id="@+id/Personpassword"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginStart="10dp"
    android:layout_marginTop="5dp"
    android:layout_marginEnd="10dp"
    android:ems="10"
    android:hint="enter the password"
    android:inputType="textPersonName"
    android:minHeight="48dp"
    android:padding="5dp"
    android:paddingLeft="5dp"
    android:paddingTop="5dp"
/>
```

```
<EditText
    android:id="@+id/Personconformpassword"
    android:layout_width="match_parent"
```

```

        android:layout_height="wrap_content"
        android:layout_marginStart="10dp"
        android:layout_marginTop="5dp"
        android:layout_marginEnd="10dp"
        android:ems="10"
        android:hint="Re-enter the password"
        android:inputType="textPersonName"
        android:minHeight="48dp"
        android:padding="5dp"
        android:paddingLeft="5dp"
        android:paddingTop="5dp"
    />
</LinearLayout>

<Button
    android:id="@+id/submitdata"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentStart="true"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginStart="163dp"
    android:layout_marginEnd="157dp"
    android:layout_marginBottom="235dp"
    android:text="submit">

</Button>

</RelativeLayout>

```

## Java File :

```

package com.example.practicalbook;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;

public class practical2 extends AppCompatActivity {
    EditText username, email, password, reenterpassword;
    Button submit;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_practical2);
    }
}

```

```

username= (EditText) findViewById(R.id.PersonName);
email= (EditText) findViewById(R.id.Personemailid);
password= (EditText) findViewById(R.id.Personpassword);
reenterpassword= (EditText) findViewById(R.id.Personconformpassword);
submit = (Button) findViewById(R.id.submitdata);

//after submit button press

submit.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {

        String name =username.getText().toString();
        String useremail =email.getText().toString();
        String pass =password.getText().toString();
        String confpass =reenterpassword.getText().toString();

        Intent intent = new
Intent(getApplicationContext(),userdatapractical2.class);

        intent.putExtra("name",name);
        intent.putExtra("email",useremail);
        intent.putExtra("password",pass);
        intent.putExtra("conformpassword",confpass);
        startActivity(intent);

    }
});

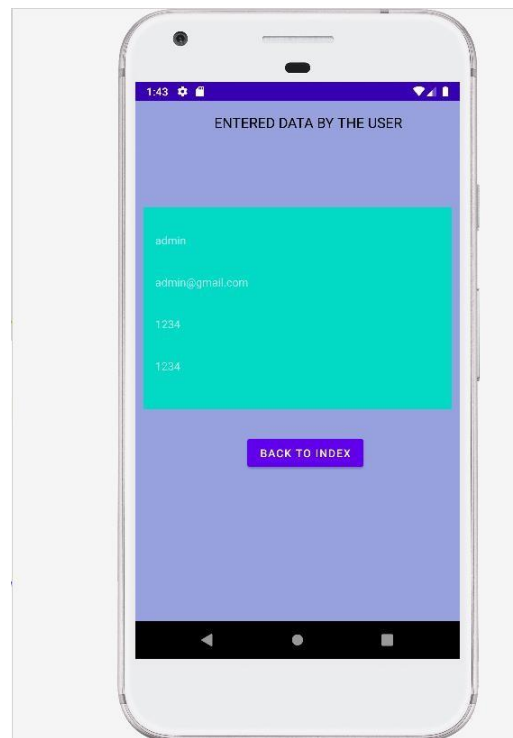
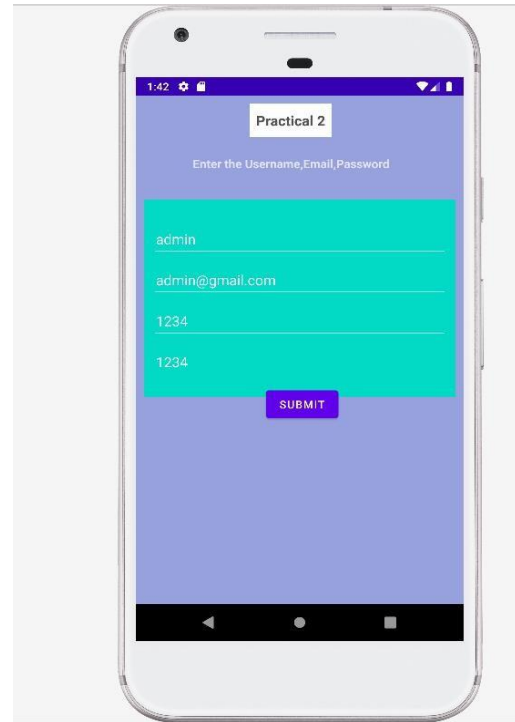
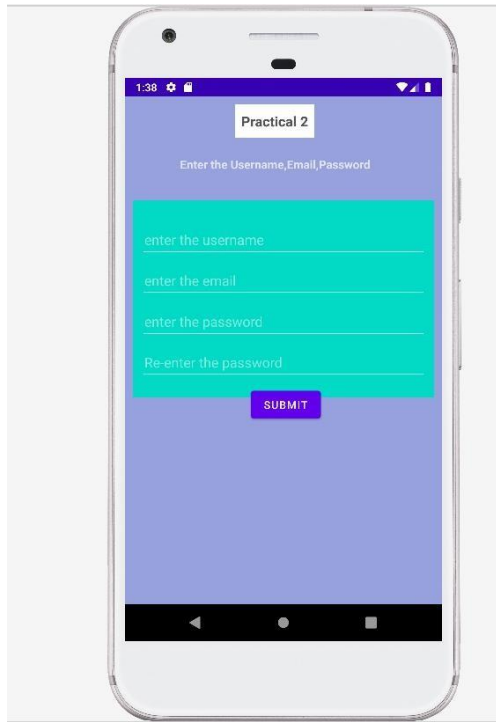
}

}

```



# Output :



## Practical No. 3

Create and validate a login application using username as Email ID else login button must remain disabled.

XML File :

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"

    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/background"

    tools:context=".practical3">

    <TextView
        android:id="@+id/practicalindex"
        android:layout_width="wrap_content"
        android:layout_height="44dp"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="10dp"
        android:layout_marginEnd="166dp"
        android:layout_marginBottom="244dp"
        android:background="@color/white"
        android:paddingLeft="3dp"
        android:paddingTop="10dp"
        android:paddingRight="3dp"
        android:text=" Practical 3 "
        android:textColor="#535252"
        android:textSize="18dp"
        android:textStyle="bold" />

    <TextView
        android:layout_width="395dp"
        android:layout_height="wrap_content"

        android:layout_alignParentEnd="true"

        android:layout_marginTop="78dp"
        android:layout_marginEnd="0dp"
        android:layout_marginBottom="120dp"
        android:paddingLeft="3dp"

        android:paddingEnd="10dp"
        android:paddingRight="3dp"
        android:text="Enter the Username,Email,Password with Validations"
        android:textSize="15dp"
        android:textStyle="bold" />

    <LinearLayout
        android:layout_width="394dp"
```

```
android:layout_height="256dp"
android:layout_alignParentStart="true"
android:layout_alignParentTop="true"
android:layout_marginStart="10dp"
android:layout_marginTop="135dp"
```

```
android:layout_marginEnd="10dp"
android:background="@color/teal_200"
android:gravity="center"
android:orientation="vertical">
```

```
<EditText
    android:id="@+id/PersonName"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:layout_marginStart="10dp"
    android:layout_marginTop="5dp"
    android:layout_marginEnd="10dp"
    android:ems="10"
    android:hint="enter the username"
    android:inputType="textPersonName"
    android:minHeight="48dp"
    android:padding="5dp"
/>
```

```
<EditText
    android:id="@+id/Personemailid"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginStart="10dp"
    android:layout_marginTop="5dp"
    android:layout_marginEnd="10dp"
    android:ems="10"
    android:hint="enter the email"
    android:inputType="textPersonName"
    android:minHeight="48dp"
    android:padding="5dp"
    android:paddingLeft="5dp"
    android:paddingTop="5dp"
/>
```

```
<EditText
    android:id="@+id/Personpassword"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginStart="10dp"
    android:layout_marginTop="5dp"
    android:layout_marginEnd="10dp"
    android:ems="10"
    android:hint="enter the password"
    android:inputType="textPersonName"
    android:minHeight="48dp"
    android:padding="5dp"
    android:paddingLeft="5dp"
    android:paddingTop="5dp"
```

```

        />

        <EditText
            android:id="@+id/Personconformpassword"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_marginStart="10dp"
            android:layout_marginTop="5dp"
            android:layout_marginEnd="10dp"
            android:ems="10"
            android:hint="Re-enter the password"
            android:inputType="textPersonName"
            android:minHeight="48dp"
            android:padding="5dp"
            android:paddingLeft="5dp"
            android:paddingTop="5dp"
        />
    </LinearLayout>

    <Button
        android:id="@+id/submitdata"
        android:layout_width="141dp"
        android:layout_height="wrap_content"
        android:layout_alignParentStart="true"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginStart="151dp"
        android:layout_marginEnd="135dp"
        android:layout_marginBottom="235dp"
        android:layout_centerHorizontal="true"
        android:text="submit">

    </Button>

</RelativeLayout>

```

## Java File :

```

package com.example.practicalbook;

import android.os.Bundle;
import android.util.Patterns;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

import com.basgeekball.awesomevalidation.AwesomeValidation;
import com.basgeekball.awesomevalidation.ValidationStyle;
import com.basgeekball.awesomevalidation.utility.RegexTemplate;

```

```

public class practical3 extends AppCompatActivity {

    EditText Username,Email, Password, Reenterpassword;
    Button submit;

    AwesomeValidation awesomeValidation;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_practical3);

        Username = (EditText) findViewById(R.id.PersonName);
        Email = (EditText) findViewById(R.id.Personemailid);
        Password = (EditText) findViewById(R.id.Personpassword);
        Reenterpassword = (EditText)
findViewById(R.id.Personconformpassword);
        submit = (Button) findViewById(R.id.submitdata);

        if (Username.getText().toString().isEmpty()){
            submit.setEnabled(true);
        }

        awesomeValidation = new AwesomeValidation(ValidationStyle.BASIC);
        awesomeValidation.addValidation(this,R.id.PersonName,
RegexTemplate.NOT_EMPTY,R.string.invalid_username);
        awesomeValidation.addValidation(this,R.id.Personemailid,
Patterns.EMAIL_ADDRESS,R.string.invalid_email);

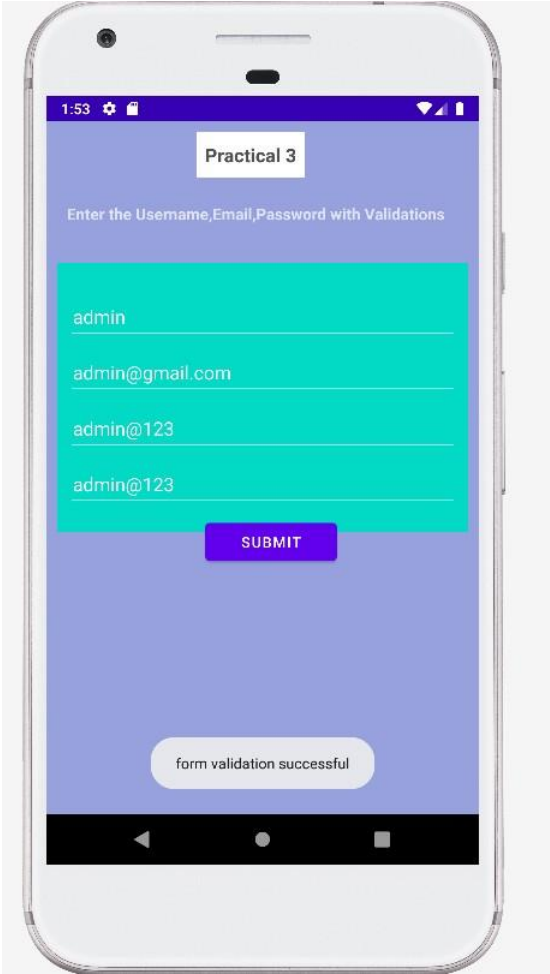
        awesomeValidation.addValidation(this,R.id.Personpassword,".{6,}",R.string.inva
lid_password);

        awesomeValidation.addValidation(this,R.id.Personconformpassword,R.id.Personpa
ssword,R.string.invalid_conform_password);

        submit.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                if (awesomeValidation.validate()) {
                    Toast.makeText(getApplicationContext(), "form validation
successful", Toast.LENGTH_SHORT).show();
                } else {
                    Toast.makeText(getApplicationContext(), "validation
failed", Toast.LENGTH_SHORT).show();
                }
            }
        });
    }
}

```

**Output :**



## Practical No. 4

Create a Login application and open a browser with any one search engine.

XML File :

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"

    android:background="@color/background"
    tools:context=".practical4">

    <TextView
        android:id="@+id/practicalindex"
        android:layout_width="wrap_content"
        android:layout_height="44dp"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="10dp"
        android:layout_marginEnd="166dp"
        android:layout_marginBottom="244dp"
        android:background="@color/white"
        android:paddingLeft="3dp"
        android:paddingTop="10dp"
        android:paddingRight="3dp"
        android:text=" Practical 4 "
        android:textColor="#535252"
        android:textSize="18dp"
        android:textStyle="bold" />

    <TextView

        android:layout_width="343dp"
        android:layout_height="52dp"

        android:layout_alignParentStart="true"

        android:layout_alignParentTop="true"
        android:layout_alignParentEnd="true"
        android:layout_marginStart="35dp"
        android:layout_marginTop="111dp"

        android:layout_marginEnd="33dp"
        android:paddingLeft="3dp"
        android:paddingEnd="10dp"
        android:paddingRight="3dp"
        android:text="Enter the Username, Password.\nThen go to the Browser
that you want"
        android:textColor="@color/black"
        android:textSize="15dp"
```

```

        android:textStyle="bold" />
<LinearLayout
    android:layout_width="402dp"
    android:layout_height="130dp"
    android:layout_alignParentStart="true"
    android:layout_alignParentTop="true"
    android:layout_marginStart="10dp"
    android:layout_marginTop="185dp"

    android:layout_marginEnd="10dp"
    android:background="@color/teal_200"
    android:gravity="center"
    android:orientation="vertical">

    <EditText
        android:id="@+id/editTextTextPersonName"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:ems="10"
        android:layout_marginStart="10dp"
        android:layout_marginEnd="5dp"
        android:hint="Username"
        android:inputType="textPersonName"

        android:textColor="#0d0707" />

    <EditText
        android:id="@+id/editTextPersonpassword"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:ems="10"
        android:layout_marginStart="10dp"
        android:layout_marginEnd="5dp"

        android:hint="Password"
        android:inputType="textPersonName"
        android:textColor="#0d0707" />

    <Button
        android:id="@+id/button"

        android:layout_marginStart="75dp"
        android:layout_marginEnd="75dp"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:onClick="enter"

        android:text="Enter" />
</LinearLayout>

<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"

```



```
    android:layout_marginEnd="122dp"
    android:layout_marginBottom="189dp"
    android:onClick="BACKTOINDEX3"
    android:text="back to index" />
```

```
</RelativeLayout>
```

## XML File 2 :

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/background"
    android:gravity="center"
    tools:context=".bwindow">
```

```
    <TextView
        android:layout_width="337dp"
        android:layout_height="40dp"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginEnd="59dp"
        android:layout_marginBottom="557dp"
        android:paddingStart="20dp"
        android:text="which browser you want to select:"
        android:textColor="@color/black"
        android:textSize="12dp">
```

```
</TextView>
```

```
    <Button
        android:id="@+id/googleweb"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentStart="true"
        android:layout_alignParentTop="true"
        android:layout_alignParentEnd="true"
        android:layout_marginStart="24dp"
        android:layout_marginTop="259dp"
        android:layout_marginEnd="16dp"
        android:text="google">
```

```
</Button>
```

```
    <Button
        android:id="@+id/braveweb"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentStart="true"
```

```

        android:layout_alignParentTop="true"
        android:layout_alignParentEnd="true"
        android:layout_marginStart="24dp"
        android:layout_marginTop="312dp"
        android:layout_marginEnd="16dp"
        android:text="brave">

</Button>

<Button

        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginEnd="122dp"
        android:layout_marginBottom="123dp"
        android:onClick="bti4"
        android:text="back to index" />

</RelativeLayout>

```

## Java File :

```

package com.example.practicalbook;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

public class practical4 extends AppCompatActivity {

    private EditText username, password;
    private Button enter;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_practical4);
        username= (EditText) findViewById(R.id.editTextTextPersonName);
        password= (EditText) findViewById(R.id.editTextPersonpassword);
        enter = (Button) findViewById(R.id.button);

        enter.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                validate(username.getText().toString()
, password.getText().toString());
            }
        });
    }
}

```

```

    });

}

private void validate(String uname,String upass){
    if (uname.equals("admin") && upass.equals("12345")){
        Intent intent = new Intent(practical4.this,bwindow.class);
        startActivity(intent);
    }else {
        Toast.makeText(this, "Enter the given details",
Toast.LENGTH_SHORT).show();
    }
}

public void BACKTOINDEX3(View view) {
    Intent intent = new Intent(this,index.class);
    startActivity(intent);
}

}

```

## Java File 2 :

```

package com.example.practicalbook;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.net.Uri;
import android.os.Bundle;
import android.view.View;

import android.widget.Button;
import android.widget.ImageView;

public class bwindow extends AppCompatActivity {
    Button google, brave;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_bwindow);
    }
}

```

```

google =findViewById(R.id.googleweb);
brave =findViewById(R.id.braveweb);

google.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        gotourl("https://www.google.co.in/");
    }

    private void gotourl(String s) {
        Uri uri= Uri.parse(s);
        startActivity(new Intent(Intent.ACTION_VIEW,uri));
    }

});

brave.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        gotourl("https://brave.com/en-in/");
    }

    private void gotourl(String s) {
        Uri uri= Uri.parse(s);
        startActivity(new Intent(Intent.ACTION_VIEW,uri));
    }

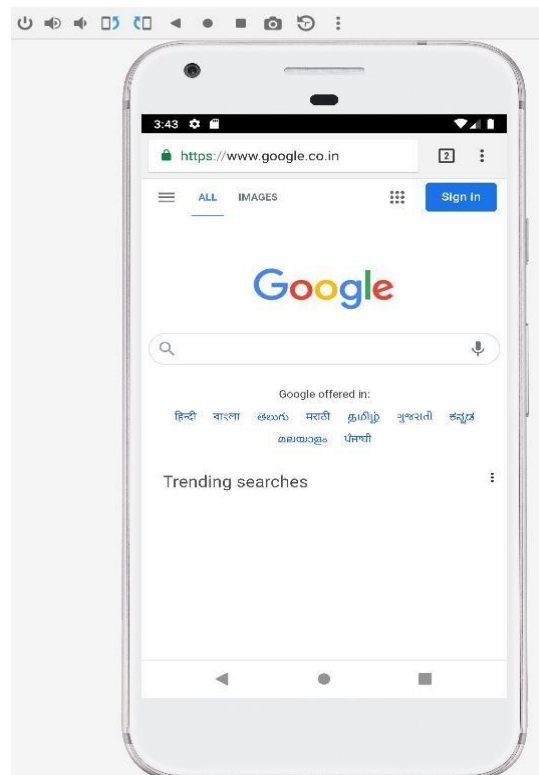
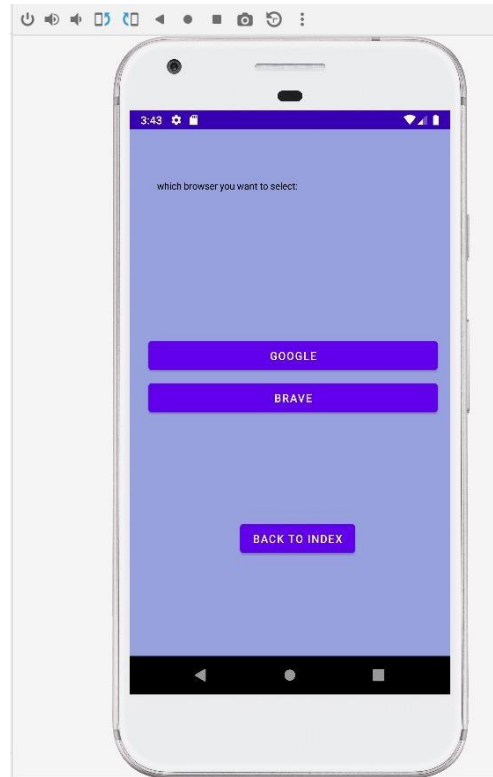
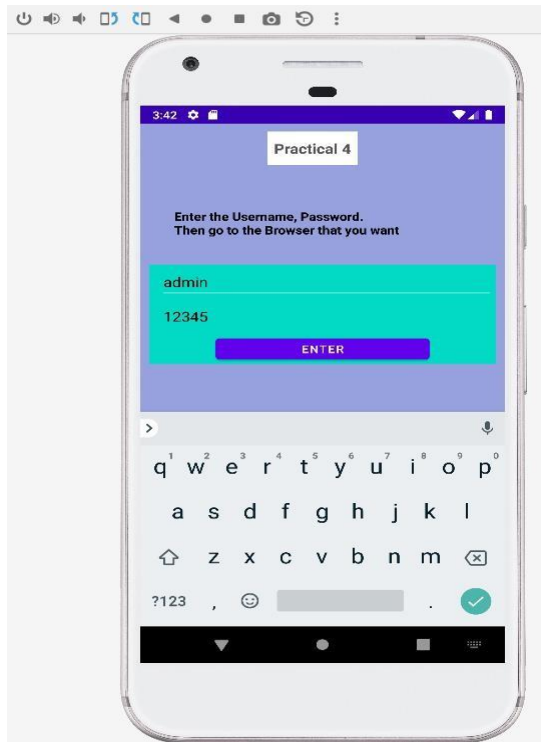
});

}

public void bti4(View view) {
    Intent intent = new Intent(this,index.class);
    startActivity(intent);
}
}

```

# Output :



## Practical No. 5

Create an application to change screen colour as per the user choice from a menu.

XML File :

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:id="@+id/rr"
    android:background="@color/background"
    tools:context=".practical5">

    <TextView

        android:layout_width="wrap_content"
        android:layout_height="44dp"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="10dp"
        android:layout_marginEnd="166dp"
        android:layout_marginBottom="244dp"
        android:background="@color/white"
        android:paddingLeft="3dp"
        android:paddingTop="10dp"
        android:text=" Practical 5 "
        android:textColor="#535252"
        android:textSize="18dp"
        android:textStyle="bold" />

    <TextView
        android:layout_width="match_parent"
        android:layout_height="75dp"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="78dp"
        android:layout_marginEnd="0dp"
        android:layout_marginBottom="120dp"
        android:paddingLeft="3dp"
        android:paddingEnd="10dp"
        android:paddingRight="3dp"
        android:paddingStart="20dp"
        android:textColor="@color/black"

        android:text="Changing the background colour with given
options.\n\nThe options are:"
        android:textSize="15dp"
        android:textStyle="bold" />

    <TextView
        android:id="@+id/whiteclr"
        android:layout_width="match_parent"
```

```

        android:layout_height="41dp"
        android:layout_alignParentBottom="true"
        android:layout_marginBottom="325dp"
        android:background="@color/white"
        android:gravity="center"
        android:text="White"
        android:layout_marginEnd="100dp"
        android:layout_marginStart="100dp"
        android:textColor="@color/black"
        android:textSize="20dp">
</TextView>
<TextView
    android:id="@+id/blackcolor"
    android:layout_width="match_parent"
    android:layout_height="41dp"
    android:layout_alignParentBottom="true"
    android:layout_marginBottom="380dp"
    android:background="@color/black"
    android:gravity="center"
    android:text="Black"
    android:layout_marginEnd="100dp"
    android:layout_marginStart="100dp"
    android:textColor="@color/white"
    android:textSize="20dp">
</TextView>
<TextView
    android:id="@+id/purpleclr"
    android:layout_width="match_parent"
    android:layout_height="41dp"
    android:layout_alignParentBottom="true"
    android:layout_marginBottom="271dp"
    android:background="@color/purple_500"
    android:gravity="center"
    android:text="Purple"
    android:layout_marginEnd="100dp"
    android:layout_marginStart="100dp"
    android:textColor="@color/white"
    android:textSize="20dp">
</TextView>
<TextView
    android:id="@+id/greenclr"
    android:layout_width="match_parent"
    android:layout_height="41dp"
    android:layout_alignParentBottom="true"
    android:layout_marginBottom="218dp"
    android:background="@color/teal_200"
    android:gravity="center"
    android:text="Green"
    android:layout_marginEnd="100dp"
    android:layout_marginStart="100dp"
    android:textColor="@color/white"
    android:textSize="20dp">
</TextView>

```

```

<TextView
    android:id="@+id/bluecolor"
    android:layout_width="match_parent"
    android:layout_height="41dp"
    android:layout_alignParentBottom="true"
    android:layout_marginBottom="434dp"
    android:background="@color/blue"
    android:gravity="center"
    android:text="Blue"
    android:layout_marginEnd="100dp"
    android:layout_marginStart="100dp"
    android:textColor="@color/white"
    android:textSize="20dp">

</TextView>
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="122dp"
    android:layout_marginBottom="140dp"
    android:onClick="practical5"
    android:text="back to index" />

</RelativeLayout>

```

## Java File :

```

package com.example.practicalbook;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.RelativeLayout;
import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class practical5 extends AppCompatActivity {
    TextView blue,black,white,green,purple;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_practical5);
//layout id
        final RelativeLayout relativeLayout;
        relativeLayout =findViewById(R.id.rr);

        blue = findViewById(R.id.bluecolor);
        black = findViewById(R.id.blackcolor);
        white = findViewById(R.id.whiteclr);

```



```

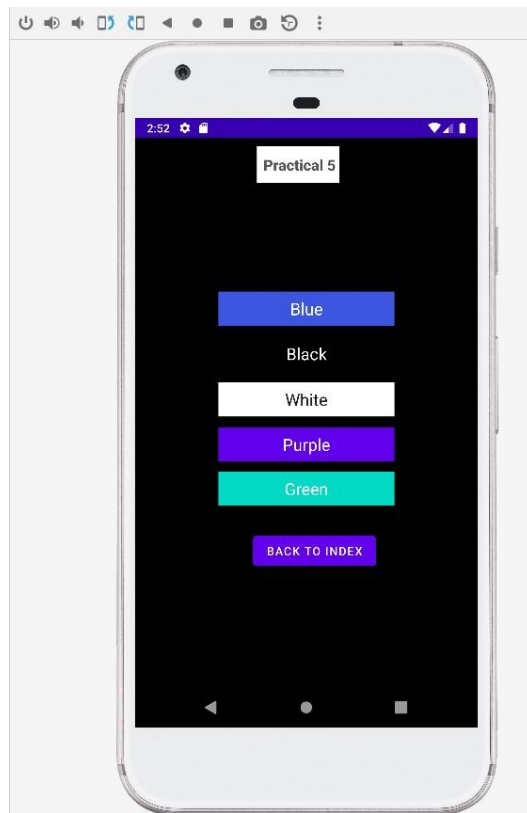
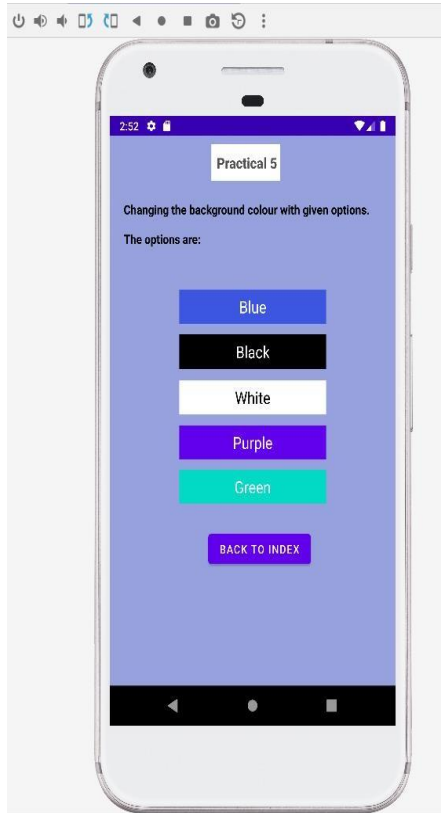
green = findViewById(R.id.greenclr);
purple = findViewById(R.id.purpleclr);
//methods are to change back ground color....
blue.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        RelativeLayout.setBackgroundResource(R.color.blue);
    }
});
black.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        RelativeLayout.setBackgroundResource(R.color.black);
    }
});
green.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        RelativeLayout.setBackgroundResource(R.color.teal_200);
    }
});
white.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        RelativeLayout.setBackgroundResource(R.color.white);
    }
});
purple.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        RelativeLayout.setBackgroundResource(R.color.purple_500);
    }
});

}

public void practical5(View view) {
    Intent intent = new Intent(this, index.class);
    startActivity(intent);
}
}

```

## Output :



## Practical No. 6

Create a background application that will open activity on specific time.

XML File :

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/background"
    tools:context=".practical6">

    <TextView
        android:id="@+id/practical1index"
        android:layout_width="wrap_content"
        android:layout_height="44dp"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="10dp"
        android:layout_marginEnd="166dp"
        android:layout_marginBottom="244dp"
        android:background="@color/white"
        android:paddingLeft="3dp"
        android:paddingTop="10dp"
        android:paddingRight="3dp"
        android:text=" Practical 6 "
        android:textColor="#535252"
        android:textSize="18dp"
        android:textStyle="bold" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="78dp"
        android:layout_marginEnd="113dp"
        android:layout_marginBottom="120dp"
        android:paddingLeft="3dp"
        android:paddingEnd="10dp"
        android:paddingRight="3dp"
        android:text="Open activity for specific time"
        android:textSize="15dp"
        android:textStyle="bold" />

    <Button
        android:id="@+id/button3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginEnd="93dp"
        android:layout_marginBottom="352dp"
        android:onClick="bckactivity"
```

```
        android:text="background activity" />
</RelativeLayout>
```

## Java File :

```
package com.example.practicalbook;

import android.annotation.SuppressLint;
import android.app.AlarmManager;
import android.app.PendingIntent;
import android.content.Context;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;

import androidx.appcompat.app.AppCompatActivity;

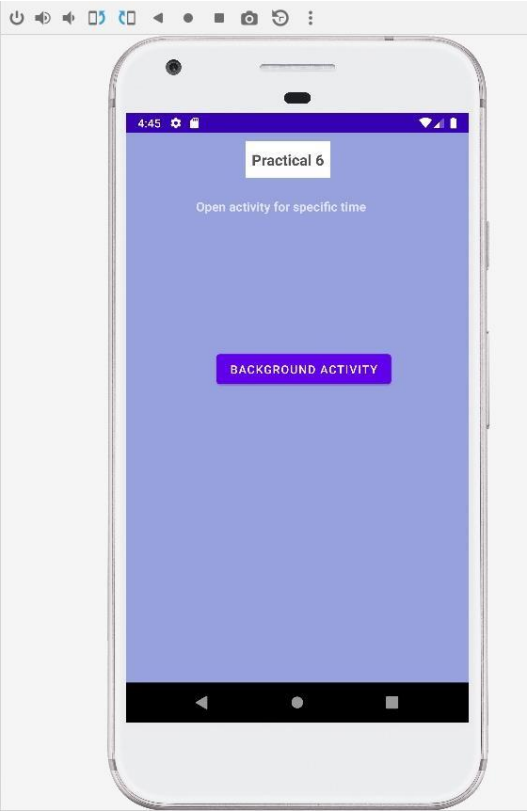
public class practical6 extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_practical6);
    }

    @SuppressWarnings("ShortAlarm")
    public void bckactivity(View view) {
        Intent intent= new Intent(this,backgroundprocess.class);
        intent.setAction("backprocess");
        @SuppressWarnings("UnspecifiedImmutableFlag") PendingIntent
        pendingIntent=PendingIntent.getBroadcast(this,0,intent,0);
        AlarmManager alarmManager =(AlarmManager)
        getSystemService(Context.ALARM_SERVICE);

        alarmManager.setRepeating(AlarmManager.RTC_WAKEUP,0,10,pendingIntent);
        finish();
    }
}
```

**Output :**



## Practical No. 7

Create spinner with strings from the resource folder . On changing spinner value, change image.

XML File :

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/background"
    tools:context=".practical7">

    <TextView
        android:id="@+id/practicalindex"
        android:layout_width="wrap_content"
        android:layout_height="44dp"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="10dp"
        android:layout_marginEnd="166dp"
        android:layout_marginBottom="244dp"
        android:background="@color/white"
        android:paddingLeft="3dp"
        android:paddingTop="10dp"
        android:paddingRight="3dp"
        android:text=" Practical 7 "
        android:textColor="#535252"
        android:textSize="18dp"
        android:textStyle="bold" />

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="78dp"
        android:layout_marginEnd="0dp"
        android:layout_marginBottom="120dp"
        android:paddingLeft="3dp"
        android:paddingEnd="10dp"
        android:paddingRight="3dp"
        android:padding="3dp"
        android:text="Create a spinner that that take value from the resource
file."
        android:textSize="15dp"
        android:textStyle="bold" />

    <TextView
        android:id="@+id/selectmenu"
        android:layout_width="225dp"
        android:layout_height="45dp"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
```

```
    android:layout_marginEnd="126dp"
    android:layout_marginBottom="487dp"
    android:paddingTop="5dp"
    android:text="Select Image Name."
    android:textColor="@color/black"

    android:textSize="20dp">
```

```
</TextView>
```

```
<ImageView
```

```
    android:id="@+id/imageView"
    android:layout_width="wrap_content"
    android:layout_height="129dp"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="89dp"
    android:layout_marginBottom="268dp"
    app:srcCompat="@drawable/google" />
```

```
<Spinner
```

```
    android:id="@+id/spinner"
    android:layout_width="66dp"
    android:layout_height="50dp"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="85dp"
    android:layout_marginBottom="486dp"></Spinner>
```

```
<Button
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="122dp"
    android:layout_marginBottom="123dp"
    android:onClick="btn"
    android:text="back to index" />
```

```
</RelativeLayout>
```

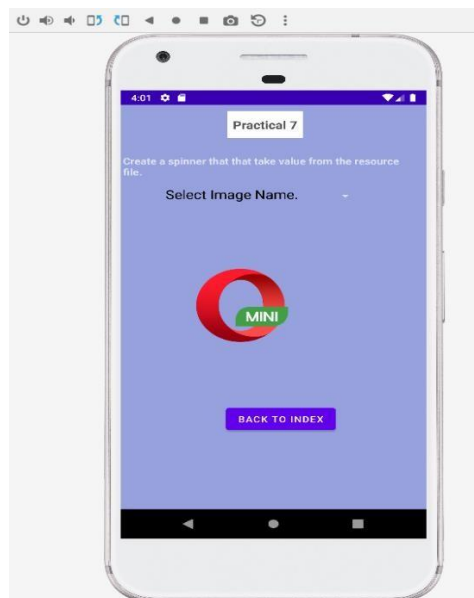
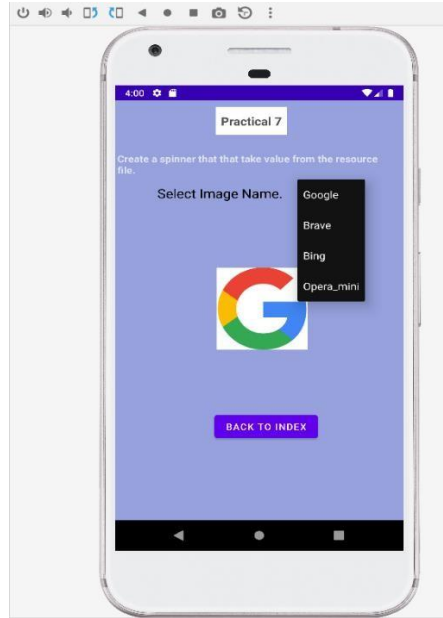
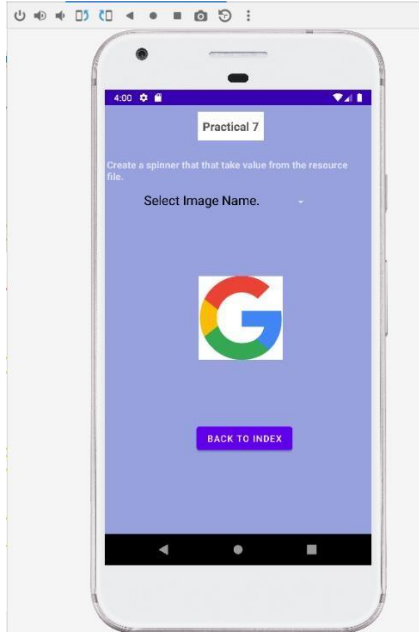




```
        @Override
        public void onNothingSelected(AdapterView<?> adapterView) {
            }
    });
}

public void btn(View view) {
    Intent intent = new Intent(this, index.class);
    startActivity(intent);
}
}
```

# Output :



## Practical No. 8

Create an UI listing the engineering branches. If user selects a branch name, display the number of semesters and subjects in each semester.

XML File :

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/background"
    tools:context=".practical8">

    <TextView
        android:id="@+id/practicalindex"
        android:layout_width="wrap_content"
        android:layout_height="44dp"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="10dp"
        android:layout_marginEnd="166dp"
        android:layout_marginBottom="244dp"
        android:background="@color/white"
        android:paddingLeft="3dp"
        android:paddingTop="10dp"
        android:paddingRight="3dp"
        android:text=" Practical 8 "
        android:textColor="#535252"
        android:textSize="18dp"
        android:textStyle="bold" />

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="78dp"
        android:layout_marginEnd="0dp"
        android:layout_marginBottom="120dp"
        android:paddingLeft="3dp"
        android:paddingEnd="10dp"
        android:paddingRight="3dp"
        android:padding="3dp"
        android:text=" Design for Engineering course structure "
        android:textSize="15dp"
        android:textStyle="bold" />

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="vertical"
```

```
android:layout_centerInParent="true"
android:paddingStart="19dp"
android:paddingEnd="19dp">
```

```
<Button
    android:id="@+id/cs"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="computer science"
    android:onClick="cc"/>
```

```
<Button
    android:id="@+id/mech"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="mechanical"
    android:onClick="mech"/>
```

```
<Button
    android:id="@+id/ece"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="electrical"
    android:onClick="ece"/>
```

```
<Button
    android:id="@+id/civil"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="civil"
    android:onClick="civil"/>
```

```
</LinearLayout>
```

```
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="122dp"
    android:layout_marginBottom="189dp"
    android:onClick="btindex"
    android:text="back to index" />
```

```
</RelativeLayout>
```

## Java File :

```
package com.example.practicalbook;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;

import androidx.appcompat.app.AppCompatActivity;

public class practical8 extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_practical8);
    }

    public void cc(View view) {
        Intent intent = new Intent(this, computerengg.class);
        startActivity(intent);
    }

    public void mech(View view) {
        Intent intent = new Intent(this, Mech.class);
        startActivity(intent);
    }

    public void ece(View view) { Intent intent = new Intent(this, ece.class);
        startActivity(intent);
    }

    public void civil(View view) {
        Intent intent = new Intent(this, civil.class);
        startActivity(intent);
    }

    public void btindex(View view) {
        Intent intent = new Intent(this, index.class);
        startActivity(intent);
    }

}
```

## XML Civil File :

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:background="@color/background"
    android:layout_height="match_parent"
    tools:context=".civil">

    <TextView
        android:layout_width="398dp"
        android:layout_height="wrap_content"
        android:layout_alignParentTop="true"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="67dp"
        android:layout_marginEnd="13dp"
        android:paddingStart="10dp"
        android:text="        CIVIL ENGINEERING"
        android:textColor="@color/black"
        android:textSize="35dp" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Fields will be added soon.."
        android:layout_centerInParent="true"
        android:textSize="25dp"
        android:textColor="#CFC465"/>

</RelativeLayout>
```

## XML ECE File :

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/background"
    tools:context=".ece">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="98dp"
        android:layout_alignParentTop="true"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="67dp"
        android:layout_marginEnd="87dp"
        android:paddingStart="10dp"
        android:text=" ELECTRICAL\nENGINEERING"
        android:textColor="@color/black"
        android:textSize="35dp" />

    <TextView
```

```

        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Fields will be added soon.."
        android:layout_centerInParent="true"
        android:textSize="25dp"
        android:textColor="#CFC465"/>
</RelativeLayout>

```

## XML CSE File :

```

<?xml version="1.0" encoding="utf-8" ?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/background"
    android:orientation="vertical"
    android:layout_margin="30dp"
    tools:context=".computerengg">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="COMPUTER SCIENCE ENGINEERING"
        android:textAlignment="center"
        android:textSize="40dp"/>

    <Spinner
        android:id="@+id/SPN1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>

    <Spinner
        android:id="@+id/SPN2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>

    <Spinner
        android:id="@+id/SPN3"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>

    <Spinner
        android:id="@+id/SPN4"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" />

    <Spinner
        android:id="@+id/SPN5"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>

    <Spinner
        android:id="@+id/SPN6"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>

```

```
</LinearLayout>
```

## XML MECH File :

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/background"
    tools:context=".Mech">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="98dp"
        android:layout_alignParentTop="true"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="67dp"
        android:layout_marginEnd="87dp"
        android:paddingStart="10dp"
        android:text="MECHANICAL\nENGINEERING"
        android:textColor="@color/black"
        android:textSize="35dp" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Fields will be added soon.."
        android:layout_centerInParent="true"
        android:textSize="25dp"
        android:textColor="#CFC465"/>

</RelativeLayout>
```

## Java Civil File :

```
package com.example.practicalbook;

import android.os.Bundle;

import androidx.appcompat.app.AppCompatActivity;

public class civil extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_civil);
    }
}
```



## Java ECE File :

```
package com.example.practicalbook;

import android.os.Bundle;

import androidx.appcompat.app.AppCompatActivity;

public class ece extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_ece);
    }
}
```

## Java CSE File :

```
package com.example.practicalbook;

import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.AdapterView.OnItemClickListener;
import android.widget.ArrayAdapter;
import android.widget.Spinner;

import androidx.appcompat.app.AppCompatActivity;

public class computerengg extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        Spinner spn1, spn2, spn3, spn4, spn5, spn6;
        ArrayAdapter adapter1, adapter2, adapter3, adapter4, adapter5,
adapter6;
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_computerengg);

        spn1 = findViewById(R.id.SPN1);
        spn2 = findViewById(R.id.SPN2);
        spn3 = findViewById(R.id.SPN3);
        spn4 = findViewById(R.id.SPN4);
        spn5 = findViewById(R.id.SPN5);
        spn6 = findViewById(R.id.SPN6);

        //adapter 1
        adapter1 =
            ArrayAdapter.createFromResource(this, R.array.sem1,
androidx.appcompat.R.layout.support_simple_spinner_dropdown_item);
```

```

adapter1.setDropDownViewResource (androidx.appcompat.R.layout.support_simple_s
pinner_dropdown_item);
    spn1.setAdapter (adapter1);
    spn1.setOnItemSelectedListener (new
AdapterView.OnItemSelectedListener () {
        @Override
        public void onItemSelected (AdapterView<?> parent, View view, int
position, long id) {
            spn1.setSelection (0);
        }

        @Override
        public void onNothingSelected (AdapterView<?> parent) {

        }
    });
//adapter 2
adapter2 =
    ArrayAdapter.createFromResource (this, R.array.sem2,
androidx.appcompat.R.layout.support_simple_spinner_dropdown_item);

adapter2.setDropDownViewResource (androidx.appcompat.R.layout.support_simple_s
pinner_dropdown_item);
    spn2.setAdapter (adapter2);
    spn2.setOnItemSelectedListener (new
AdapterView.OnItemSelectedListener () {
        @Override
        public void onItemSelected (AdapterView<?> parent, View view, int
position, long id) {
            spn2.setSelection (0);
        }

        @Override
        public void onNothingSelected (AdapterView<?> parent) {

        }
    });
//adapter3
adapter3 =
    ArrayAdapter.createFromResource (this, R.array.sem3,
androidx.appcompat.R.layout.support_simple_spinner_dropdown_item);

adapter3.setDropDownViewResource (androidx.appcompat.R.layout.support_simple_s
pinner_dropdown_item);
    spn3.setAdapter (adapter3);
    spn3.setOnItemSelectedListener (new
AdapterView.OnItemSelectedListener () {
        @Override
        public void onItemSelected (AdapterView<?> parent, View view, int
position, long id) {
            spn3.setSelection (0);
        }

        @Override
        public void onNothingSelected (AdapterView<?> parent) {

```

```

        }
    });
    //adapter4
    adapter4 =
        ArrayAdapter.createFromResource(this, R.array.sem4,
            androidx.appcompat.R.layout.support_simple_spinner_dropdown_item);

    adapter4.setDropDownViewResource(androidx.appcompat.R.layout.support_simple_s
        pinner_dropdown_item);
    spn4.setAdapter(adapter4);
    spn4.setOnItemSelectedListener(new
    AdapterView.OnItemSelectedListener() {
        @Override
        public void onItemSelected(AdapterView<?> parent, View view, int
        position, long id) {
            spn4.setSelection(0);
        }

        @Override
        public void onNothingSelected(AdapterView<?> parent) {

        }
    });
    //adapter5
    adapter5 =
        ArrayAdapter.createFromResource(this, R.array.sem5,
            androidx.appcompat.R.layout.support_simple_spinner_dropdown_item);

    adapter5.setDropDownViewResource(androidx.appcompat.R.layout.support_simple_s
        pinner_dropdown_item);
    spn5.setAdapter(adapter5);
    spn5.setOnItemSelectedListener(new
    AdapterView.OnItemSelectedListener() {
        @Override
        public void onItemSelected(AdapterView<?> parent, View view, int
        position, long id) {
            spn5.setSelection(0);
        }

        @Override
        public void onNothingSelected(AdapterView<?> parent) {

        }
    });
    adapter6 =
        ArrayAdapter.createFromResource(this, R.array.sem6,
            androidx.appcompat.R.layout.support_simple_spinner_dropdown_item);

    adapter6.setDropDownViewResource(androidx.appcompat.R.layout.support_simple_s
        pinner_dropdown_item);
    spn6.setAdapter(adapter6);
    spn6.setOnItemSelectedListener(new
    AdapterView.OnItemSelectedListener() {

```

```

        @Override
        public void onItemSelected(AdapterView<?> parent, View view, int
position, long id) {
            spn6.setSelection(0);
        }

        @Override
        public void onNothingSelected(AdapterView<?> parent) {

        }
    });
}
}

```

## Java Mech. File :

```

package com.example.practicalbook;

import android.os.Bundle;

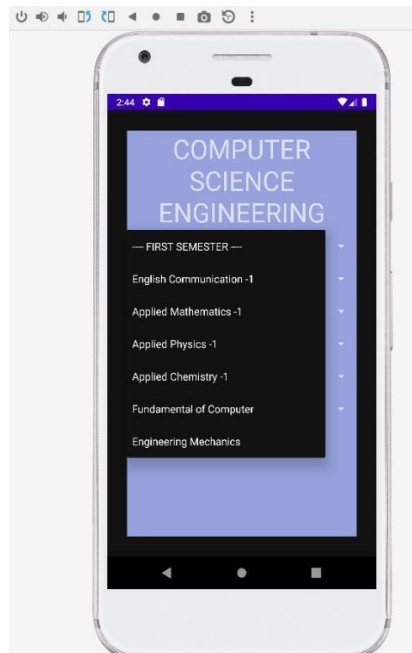
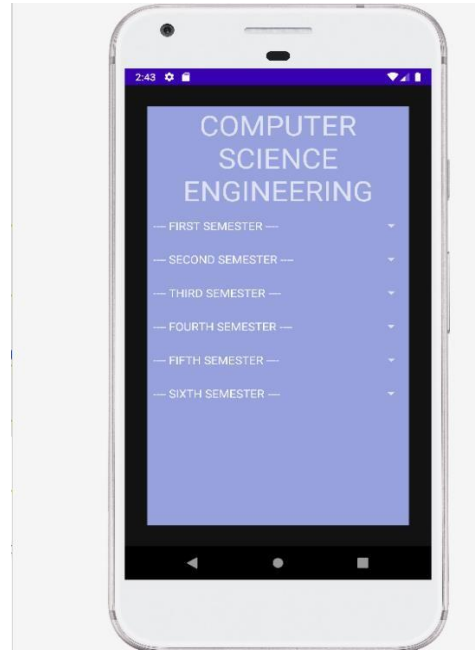
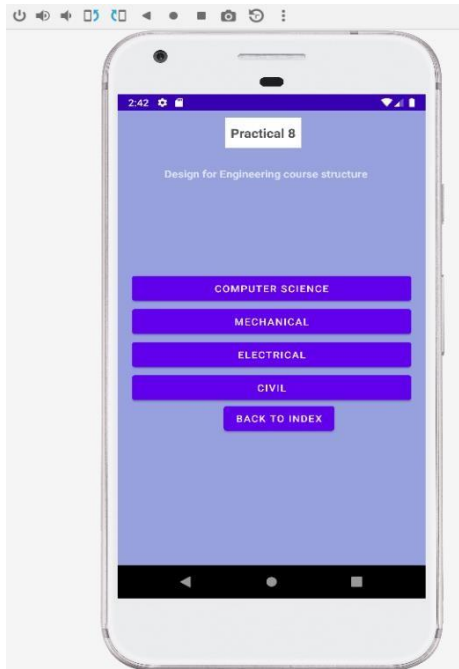
import androidx.appcompat.app.AppCompatActivity;

public class Mech extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_mech);
    }
}

```

# Output :



## Practical No. 9

**Create an application that will create database to store username and password.**

### XML File :

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/background"
    tools:context=".practical9">
    <TextView
        android:id="@+id/practical1index"
        android:layout_width="wrap_content"
        android:layout_height="44dp"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="10dp"
        android:layout_marginEnd="159dp"
        android:layout_marginBottom="244dp"
        android:background="@color/white"
        android:paddingLeft="3dp"
        android:paddingTop="10dp"
        android:paddingRight="3dp"
        android:text=" Practical 9 "
        android:textColor="#535252"
        android:textSize="18dp"
        android:textStyle="bold" />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
```

```
android:layout_alignParentEnd="true"
android:layout_marginTop="78dp"
android:layout_marginEnd="48dp"
android:layout_marginBottom="120dp"
android:paddingStart="10dp"
android:paddingLeft="3dp"
android:paddingEnd="10dp"
android:paddingRight="3dp"
android:text="Store the Username, Password in Database"
android:textColor="@color/black"
android:textSize="15dp"
android:textStyle="bold" />
```

```
<LinearLayout
```

```
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_centerInParent="true"
    android:layout_marginStart="60dp"
    android:orientation="vertical">
```

```
<EditText
```

```
    android:id="@+id/editTextTextPersonName2"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="Enter username"
    android:inputType="textPersonName"
    />
```

```
<EditText
```

```
    android:id="@+id/editTextTextPassword"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="Enter password"
```

```

        android:inputType="textPassword" />
    <Button
        android:id="@+id/enterdta"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:padding="8dp"
        android:onClick="enter"
        android:text="enter"/>
</LinearLayout>
</RelativeLayout>

```

## Java File 1 :

```

package com.example.practicalbook;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;

public class practical9 extends AppCompatActivity {
    EditText username,password;
    Button enter;
    DatabaseReference Studentdb;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_practical9);

        username =(EditText) findViewById(R.id.editTextTextPersonName2);
        password =(EditText) findViewById(R.id.editTextTextPassword);
        enter =(Button) findViewById(R.id.enterdta);
        Studentdb =
        FirebaseDatabase.getInstance().getReference().child("students");
        enter.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                insertdata();
                Intent intent =new
                Intent(getApplicationContext(),practical9output.class);

```



```

        startActivity(intent);
    }
});

}

private void insertdata(){
    String Username = username.getText().toString();
    String Password = password.getText().toString();

    studata Studata =new studata(Username,Password);
    Studentdb.push().setValue(Studata);
    Toast.makeText(this, "data inserted..", Toast.LENGTH_SHORT).show();

}

}

```

## Java File 2 :

```

package com.example.practicalbook;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;

import androidx.appcompat.app.AppCompatActivity;

public class practical9output extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_practical9output);
    }

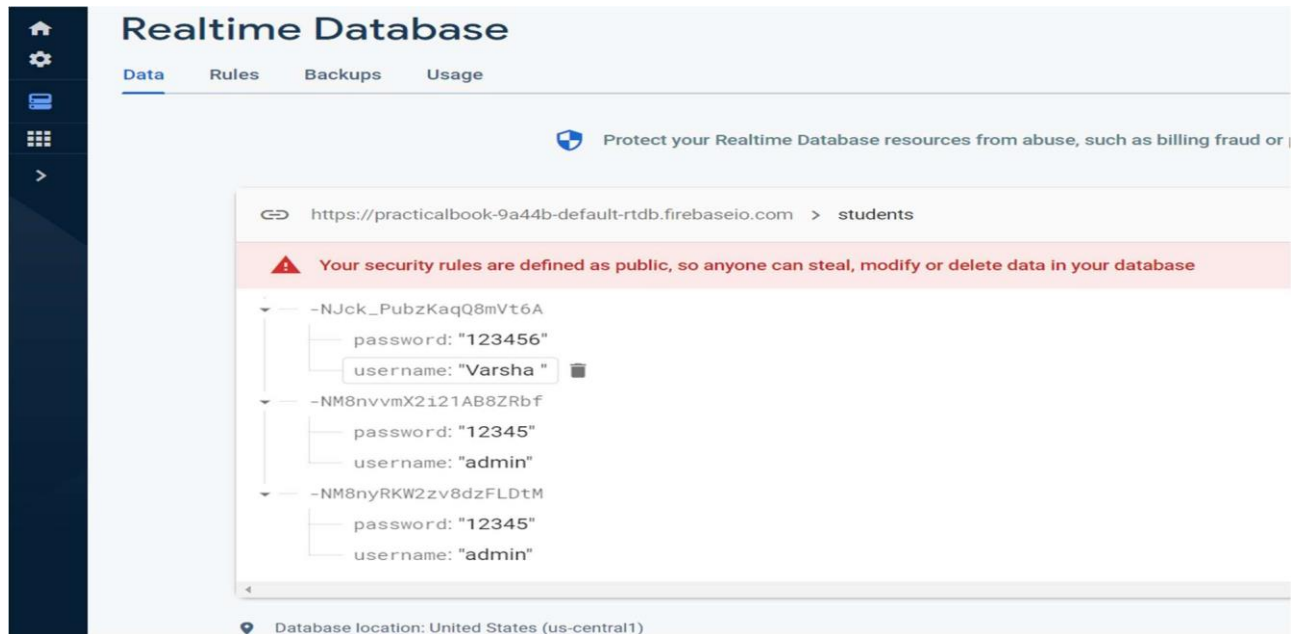
    public void Bti9(View view) {
        Intent intent = new Intent(this,index.class);
        startActivity(intent);
    }

}

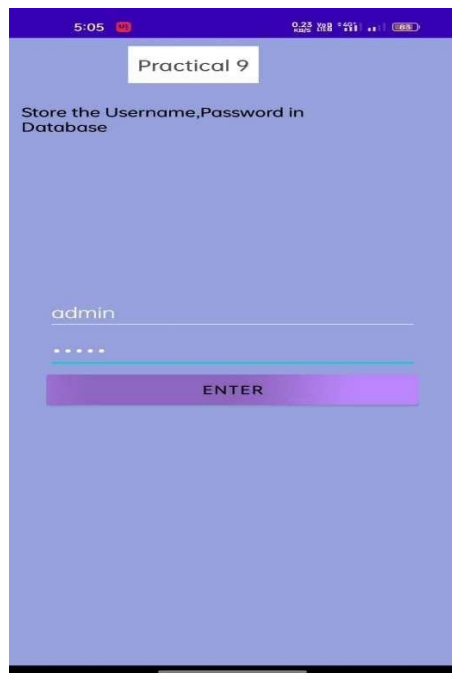
```

Output :

### Realtime database



### Data inserting window



### Data inserted window



## Practical No. 10

**Create an application to call a phone number entered by the user in the Edit text box.**

### XML File :

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/background"
    tools:context=".practical10">
    <TextView
        android:id="@+id/practical1index"
        android:layout_width="wrap_content"
        android:layout_height="44dp"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="10dp"
        android:layout_marginEnd="166dp"
        android:layout_marginBottom="244dp"
        android:background="@color/white"
        android:paddingLeft="3dp"
        android:paddingTop="10dp"
        android:paddingRight="3dp"
        android:text=" Practical 10 "
        android:textColor="#535252"
        android:textSize="18dp"
        android:textStyle="bold" />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
```

```
android:layout_alignParentEnd="true"
android:layout_marginTop="78dp"
android:layout_marginEnd="58dp"
android:layout_marginBottom="120dp"
android:paddingLeft="3dp"
android:paddingEnd="10dp"
android:paddingRight="3dp"
android:text="App for calling the entered phone number."
android:textSize="15dp"
android:textStyle="bold" />
```

```
<EditText
```

```
    android:id="@+id/phonenumber"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_alignParentStart="true"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginStart="113dp"
    android:layout_marginEnd="66dp"
    android:layout_marginBottom="442dp"
    android:hint="Enter The Number" />
```

```
<ImageButton
```

```
    android:id="@+id/imageButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="311dp"
    android:layout_marginBottom="438dp"
    android:rotationX="176"
    app:srcCompat="@android:drawable/ic_menu_call" />
```

```
<Button
```

```
        android:id="@+id/callnumber"
        android:layout_width="243dp"
        android:layout_height="wrap_content"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginEnd="66dp"
        android:layout_marginBottom="353dp"
        android:text="call" />
<TextView
    android:id="@+id/textView2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentBottom="true"
    android:layout_marginBottom="103dp"
    android:text="This is ' THE END ' of project."
    android:textSize="30dp"
    android:textStyle="bold"
    android:layout_marginStart="12dp"
    android:textColor="@color/black"/>
</RelativeLayout>
```

## Java File :

```
package com.example.practicalbook;

import android.Manifest;
import android.content.Intent;
import android.content.pm.PackageManager;
import android.net.Uri;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.ActivityCompat;

public class practical10 extends AppCompatActivity {

    EditText phone;
    Button call;

    @Override

    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_practical10);
        phone= (EditText) findViewById(R.id.phonenumber);
        call=(Button) findViewById(R.id.callnumber);
        call.setOnClickListener(new View.OnClickListener() {

            @Override

            public void onClick(View v) {

                Intent intent= new Intent(Intent.ACTION_CALL);
                String number=phone.getText().toString();
                if (number.trim().isEmpty()){

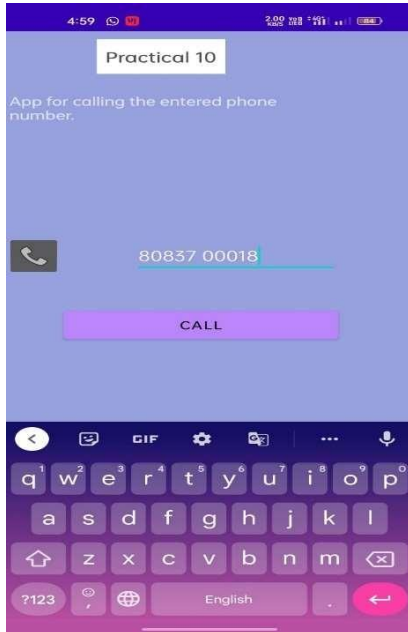
                    Toast.makeText(practical10.this, "Please enter the
number.", Toast.LENGTH_SHORT).show();

                }

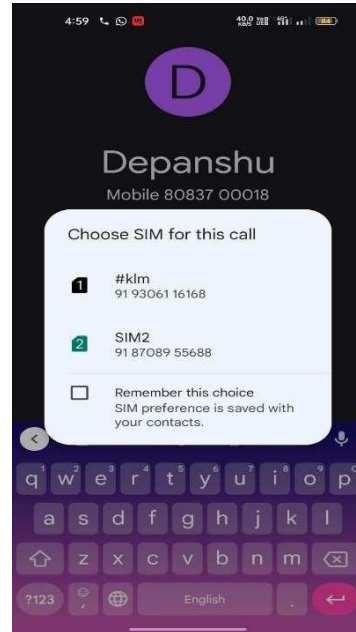
                else{
```

```
        intent.setData(Uri.parse("tel:"+number));
    }
    if
(ActivityCompat.checkSelfPermission(getApplicationContext(),
Manifest.permission.CALL_PHONE) != PackageManager.PERMISSION_GRANTED) {
        Toast.makeText(practical10.this, "Please Grant the
permissions", Toast.LENGTH_SHORT).show();
        request();
    }
    else {
        startActivity(intent);
    }
});
}
private void request(){
    ActivityCompat.requestPermissions(practical10.this,new
String[]{Manifest.permission.CALL_PHONE},1);
}
}
```

## Output :



Phone number dialing pad



Calling