Practical No: 10

Name: Prince Maurya
Roll No: 66

1. **Write a program to create a login form for a social networking site.**

login_button.xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<selector xmlns:android="http://schemas.android.com/apk/res/android">
  <item android:state_pressed="false">
    <shape android:shape="rectangle">
      <stroke
        android:color="#FF4081"
      android:width="1dp"/>
      <solid
        android:color="#FF4081"/>
    </shape>
  </item>
  <item android:state_pressed="true">
    <shape android:shape="rectangle">
      <stroke
        android:color="#D81B60"
      android:width="1dp"/>
      <solid
        android:color="#D81B60"/>
    </shape>
  </item>
</selector>
```

rounded_login_button.xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<selector xmlns:android="http://schemas.android.com/apk/res/android">
  <item android:state_pressed="false">
    <shape android:shape="rectangle">
      <stroke
        android:color="#0000FF"
      android:width="1dp"/>
      <solid
        android:color="#0000FF"/>
      <corners android:radius="24dp" />
    </shape>
  </item>
  <item android:state_pressed="true">
    <shape android:shape="rectangle">
      <stroke
        android:color="#000080"
      android:width="1dp"/>
      <solid
        android:color="#000080"/>
      <corners android:radius="24dp" />
    </shape>
```

```xml
        </item>
</selector>
```

sign_up_button.xml:
```xml
<?xml version="1.0" encoding="utf-8"?>
<selector xmlns:android="http://schemas.android.com/apk/res/android">
    <item android:state_pressed="false">
        <shape android:shape="rectangle">
            <stroke
                android:color="#0000FF"
                android:width="1dp"/>
            <solid android:color="#0000FF"/>
        </shape>
    </item>
    <item android:state_pressed="true">
        <shape android:shape="rectangle">
            <stroke
                android:color="#000080"
                android:width="1dp"/>
            <solid android:color="#000080"/>
        </shape>
    </item>
</selector>
```

Activity_main.xml(code for layout):-
```xml
<?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="#FFFF00"
    tools:context=".MainActivity">

    <ImageView
        android:layout_width="130dp"
        android:layout_height="130dp"
        android:layout_marginTop="70dp"
        android:src="@drawable/img"
        android:layout_centerHorizontal="true"/>

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="160dp"
        android:orientation="vertical"
        android:layout_alignParentBottom="true"
        android:weightSum="2">

        <Button
            android:id="@+id/b1"
```

```xml
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:text="Login"
            android:onClick="onClick"
            android:textColor="#FFFFFF"
            android:background="@drawable/login_button"
            android:layout_weight="1"/>

        <Button
            android:id="@+id/b2"
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:text="Signup"
            android:textColor="#FFFFFF"
            android:background="@drawable/sign_up_button"
            android:layout_weight="1"/>
    </LinearLayout>
</RelativeLayout>
```

MainActivity.java(code for functionality):-

```java
package com.example.practical8;

import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
public class MainActivity extends AppCompatActivity {
    private Button b1;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        b1=findViewById(R.id.b1);
    }
    public void onClick(View view) {
        Intent i1 = new Intent(this,MainActivity2.class);
        startActivity(i1);
    }
}
```

Activity_main2.xml

```xml
<?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:orientation="vertical"
```

```xml
    android:background="#3498db"
    tools:context=".MainActivity2">

<ImageView
android:layout_width="130dp"
android:layout_height="130dp"
android:layout_marginTop="70dp"
android:src="@drawable/img"
android:layout_centerHorizontal="true"/>

<LinearLayout
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:orientation="vertical"
android:layout_marginTop="150dp" />

<androidx.cardview.widget.CardView
android:layout_margin="64dp"
android:layout_width="match_parent"
android:layout_height="wrap_content"
app:cardElevation="8dp"
app:cardCornerRadius="15dp"
app:cardMaxElevation="12dp"
android:background="#ffffff"> <!-- Replace with your color code for white -->

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="vertical"
    android:padding="24dp">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_gravity="center_horizontal"
        android:text="Login"
        android:textAlignment="center"
        android:textColor="#000000"
    android:textSize="25sp"
    android:textStyle="bold" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="30dp"
        android:text="Username"
        android:textSize="20sp" />

    <EditText
        android:id="@+id/e1"
        android:layout_width="match_parent"
```

```xml
            android:layout_height="wrap_content"
            android:layout_marginTop="10dp"
            android:hint="Enter Username"
            android:inputType="text" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="10dp"
        android:text="Password"
        android:textSize="20sp" />

    <com.google.android.material.textfield.TextInputLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        app:passwordToggleEnabled="true">

        <EditText
            android:id="@+id/e2"
            android:layout_width="match_parent"
            android:layout_height="50dp"
            android:hint="Enter Password"
            android:inputType="textPassword" />
    </com.google.android.material.textfield.TextInputLayout>

    <Button
        android:id="@+id/activity_main_loginButton"
        android:layout_width="200dp"
        android:layout_gravity="center"
        android:layout_height="wrap_content"
        android:onClick="login"
        android:background="@drawable/rounded_login_button"
        android:text="Login"
        android:textColor="#ffffff"
    android:layout_marginTop="20dp"
    android:textSize="18sp"/>
</LinearLayout>
</androidx.cardview.widget.CardView>
    </RelativeLayout>
```

MainActivity2.java
```java
package com.example.practical8;

import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.TextView;
import android.widget.Toast;
public class MainActivity2 extends AppCompatActivity {
    @Override
```

```java
        protected void onCreate(Bundle savedInstanceState) {
            super.onCreate(savedInstanceState);
            setContentView(R.layout.activity_main2);
        }
        public void login(View view) {
            TextView uid = (TextView)findViewById(R.id.e1);
            TextView upass = (TextView)findViewById(R.id.e2);
            String id = uid.getText().toString();
            String pass = upass.getText().toString();
            if(id.equals("Prince Maurya") && pass.equals("Maurya10"))
            {
                Intent i2 = new Intent(this,MainActivity3.class);
                i2.putExtra("id",uid.getText().toString());
                startActivity(i2);
            }
            else
            {
                Toast.makeText(this,"Invalid Username and Password",Toast.LENGTH_SHORT).show();
            }
        }
}
```

Activity_main3.xml

```xml
<?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="#3498db"
    tools:context=".MainActivity3">

    <ImageView
        android:layout_width="130dp"
        android:layout_height="130dp"
        android:layout_marginTop="70dp"
        android:src="@drawable/img"
        android:layout_centerHorizontal="true"/>

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Welcome"
        android:layout_marginTop="200dp"
        android:layout_centerHorizontal="true"
        android:textSize="30sp"
        android:textColor="#000000"
        android:textStyle="bold"/>

    <TextView
        android:id="@+id/t3"
```

```xml
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginTop="300dp"
            android:layout_centerHorizontal="true"
            android:textSize="30sp"
            android:textColor="#000000"
            android:textStyle="bold"/>
</RelativeLayout>
```

MainActivity3.java
```java
package com.example.practical8;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.TextView;
public class MainActivity3 extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main3);
        TextView t3 = (TextView)findViewById(R.id.t3);
        Bundle b = getIntent().getExtras();
        String data_receive= b.getString("id");
        t3.setText("Hi "+data_receive.toUpperCase()); }}Output:
```
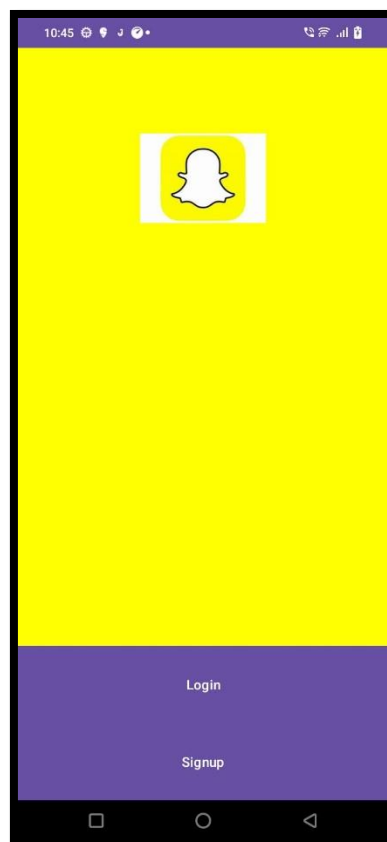

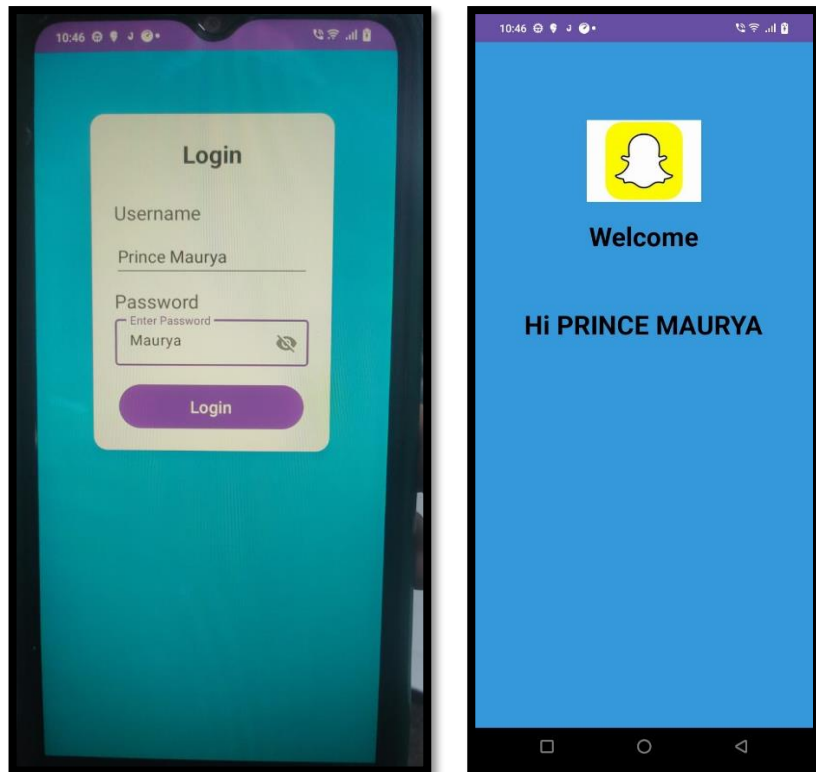Fig: 10.1 SnapChat Page

Fig 2: Login Page

2. Write a program to create a login form for student registration system.

Activity_main.xml(code for layout):-

```xml
<?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:orientation="vertical"
    android:padding="16dp"
    tools:context=".MainActivity">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="100dp"
        android:text="@string/h1"
        android:gravity="center"
        android:textStyle="bold"
        android:textSize="30sp"
        android:textColor="#FF1100"/>
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="50dp"
        android:orientation="vertical">
        <com.google.android.material.textfield.TextInputLayout
```

```xml
    android:id="@+id/inputLayout1"
    style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"
    android:layout_width="match_parent"
    android:layout_height="107dp"
    app:boxStrokeColor="#2196F3"
    app:helperText="Required*"
    app:helperTextTextColor="#F80000"
    app:hintTextColor="#2196F3"
    app:placeholderTextColor="#FFFFFF">
    <EditText
        android:id="@+id/ed1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="4dp"
        android:layout_marginTop="40dp"
        android:hint="Enter Name" />
</com.google.android.material.textfield.TextInputLayout>
<com.google.android.material.textfield.TextInputLayout
    android:id="@+id/inputLayout2"
    style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"
    android:layout_width="match_parent"
    android:layout_height="107dp"
    app:boxStrokeColor="#2196F3"
    app:helperText="Required*"
    app:helperTextTextColor="#F80000"
    app:hintTextColor="#2196F3"
    app:placeholderTextColor="#FFFFFF"
    >
    <EditText
        android:id="@+id/ed2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="4dp"
        android:layout_marginTop="40dp"
        android:hint="Enter Roll No" />
</com.google.android.material.textfield.TextInputLayout>
<com.google.android.material.textfield.TextInputLayout
    android:id="@+id/inputLayout3"
    style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"
    android:layout_width="match_parent"
    android:layout_height="107dp"
    app:boxStrokeColor="#2196F3"
    app:helperText="Required*"
    app:helperTextTextColor="#F80000"
    app:hintTextColor="#2196F3"
    app:placeholderTextColor="#FFFFFF"
    >
    <EditText
        android:id="@+id/ed3"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
```

```xml
            android:layout_margin="4dp"
            android:layout_marginTop="40dp"
            android:hint="Enter Enrollment No" />
    </com.google.android.material.textfield.TextInputLayout>
</LinearLayout>
<Button
    android:id="@+id/b1"
    android:layout_width="250dp"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:layout_marginTop="10dp"
    android:height="60dp"
    android:text="@string/register"
    android:background="@drawable/register_btn"
    app:iconGravity="textStart"
    app:iconTint="#FFFFFF" />
</LinearLayout>
```

MainActivity.java(code for functionality):-

```java
package com.example.practical10b;

import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.text.TextUtils;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
    EditText ed1,ed2,ed3;
    Button b1;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        EditText ed1 = findViewById(R.id.ed1);
        EditText ed2 = findViewById(R.id.ed2);
        EditText ed3 = findViewById(R.id.ed3);
        Button b1= findViewById(R.id.b1);
        b1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                if (TextUtils.isEmpty(ed1.getText().toString())){
                    ed1.setError("Name is Required");
                }
                if (TextUtils.isEmpty(ed2.getText().toString())){
                    ed2.setError("Roll No is Required");
                }
                if (TextUtils.isEmpty(ed3.getText().toString())){
```

```java
                ed3.setError("Enrollment No is Required");
            }
            else {
                Toast.makeText(MainActivity.this,"Proceed..",Toast.LENGTH_SHORT).show();
                Intent i1 = new Intent(MainActivity.this, MainActivity2.class);
                i1.putExtra("name", ed1.getText().toString());
                i1.putExtra("rollno", ed2.getText().toString());
                i1.putExtra("enroll", ed3.getText().toString());
                startActivity(i1);
            }
        }
    });
}
}
```

strings.xml:
```xml
<resources>
    <string name="app_name">practical10B</string>
    <string name="h1">Student Registration Form</string>
    <string name="register">Register</string>
</resources>
```

register_btn.xml:
```xml
<?xml version="1.0" encoding="utf-8"?>
<selector xmlns:android="http://schemas.android.com/apk/res/android">
    <item android:state_pressed="false">
        <shape android:shape="rectangle">
            <stroke
                android:color="#9C27B0"
            android:width="1dp"/>
            <solid
                android:color="#9C27B0"/>
            <corners android:radius="24dp" />
        </shape>
    </item>
    <item android:state_pressed="true">
        <shape android:shape="rectangle">
            <stroke
                android:color="#7B1FA2"
            android:width="1dp"/>
            <solid
                android:color="#7B1FA2"/>
            <corners android:radius="24dp" />
        </shape>
    </item>
</selector>
```

activity_main2.xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
```

```xml
    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:orientation="vertical"
    android:gravity="center"
    tools:context=".MainActivity2">
    <TextView
        android:id="@+id/t1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Name"
        android:gravity="center"
        android:layout_marginLeft="50dp"
        android:layout_marginRight="50dp"
        android:textStyle="bold"
        android:textSize="20sp"
        />
    <TextView
        android:id="@+id/t2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="15dp"
        android:gravity="center"
        android:text="RollNo"
        android:layout_marginLeft="50dp"
        android:layout_marginRight="50dp"
        android:textStyle="bold"
        android:textSize="20sp"
        />
    <TextView
        android:id="@+id/t3"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="15dp"
        android:gravity="center"
        android:text="Enrollment No"
        android:layout_marginLeft="50dp"
        android:layout_marginRight="50dp"
        android:textStyle="bold"
        android:textSize="20sp"
        />
</LinearLayout>
```

MainActivity2.java:

```java
package com.example.practical10b;

import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
```

```
import android.os.Bundle;
import android.widget.TextView;
public class MainActivity2 extends AppCompatActivity {
    TextView t1,t2,t3;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);
        TextView t1=(TextView)findViewById(R.id.t1);
        TextView t2=(TextView)findViewById(R.id.t2);
        TextView t3=(TextView)findViewById(R.id.t3);
        Intent iGet = getIntent();
        t1.setText(iGet.getStringExtra("name"));
        t2.setText(iGet.getStringExtra("rollno"));
        t3.setText(iGet.getStringExtra("enroll"));
    }
}
```
Output:

Fig: 10.2 Student Register