Android Lab Cycle 1

1. Design a simple calculator, and set properties using .xml file.

   activity_main.xml

```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"
    tools:context=".MainActivity"
    android:padding="20dp"
    android:orientation="vertical"
    android:background="#FFC0CB">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="CALCULATOR"
        android:textSize="25sp"
        android:layout_marginBottom="16dp"
        android:textColor="@android:color/black" />

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:layout_marginBottom="20dp">

        <EditText
            android:id="@+id/first_no"
            android:layout_width="113dp"
            android:layout_height="105dp"
            android:layout_marginHorizontal="50dp"
            android:ems="10"
            android:hint="1st numb" />

        <EditText
            android:id="@+id/second_no"
            android:layout_width="wrap_content"
            android:layout_height="88dp"
            android:ems="10"
            android:hint="2nd numb" />

    </LinearLayout>

    <LinearLayout
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:layout_marginBottom="20dp">

        <TextView
```

```xml
            android:textSize="35sp"
            android:id="@+id/answer"
            android:layout_width="102dp"
            android:layout_height="59dp"
            android:layout_marginHorizontal="50dp"
            android:hint="Ans" />

    </LinearLayout>

    <LinearLayout
        android:orientation="vertical"
        android:layout_marginLeft="250dp"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="30dp">

        <Button
            android:id="@+id/sub"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="-"
            android:textSize="25sp"
            android:layout_marginBottom="16dp" />

        <Button
            android:id="@+id/add"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginBottom="16dp"
            android:text="+"
            android:textSize="25sp"
            tools:ignore="OnClick" />

        <Button
            android:id="@+id/div"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="/"
            android:textSize="25sp"
            android:layout_marginBottom="16dp" />

        <Button
            android:id="@+id/mul"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginBottom="16dp"
            android:text="X"
            android:textSize="25sp"/>

        <Button
            android:id="@+id/equals"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginBottom="16dp"
            android:text="="
            android:textSize="35sp"/>
    </LinearLayout>


</LinearLayout>
```
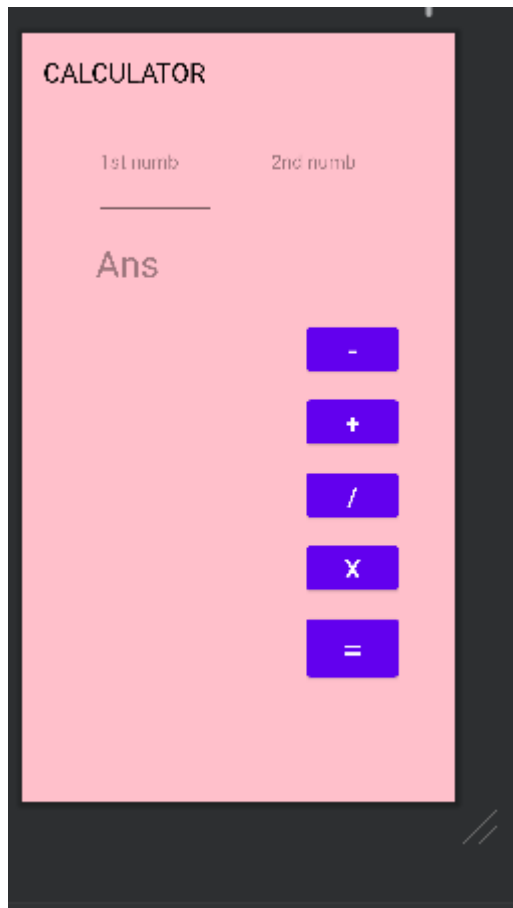
2. Develop an application for a simple registration page using .xml file.

activity_Main.xml

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

    <!--text view for heading-->

    <EditText
        android:id="@+id/idEdtUserName3"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@id/idTVHeader"
        android:layout_marginStart="10dp"
        android:layout_marginTop="184dp"
        android:layout_marginEnd="10dp"
        android:hint="Enter ph:number"
        android:inputType="textEmailAddress" />
```

```xml
    <EditText
        android:id="@+id/idEdtUserName2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@id/idTVHeader"
        android:layout_marginStart="10dp"
        android:layout_marginTop="117dp"
        android:layout_marginEnd="10dp"
        android:hint="Enter address"
        android:inputType="textEmailAddress" />

    <TextView
        android:id="@+id/idTVHeader"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="30dp"
        android:gravity="center_horizontal"
        android:padding="5dp"
        android:text=" Cab Booking \n Register Form"
        android:textAlignment="center"
        android:textColor="#ff0000"
        android:textSize="18sp" />

    <!--edit text for user name-->
    <EditText
        android:id="@+id/idEdtUserName"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@id/idTVHeader"
        android:layout_marginStart="10dp"
        android:layout_marginTop="50dp"
        android:layout_marginEnd="10dp"
        android:hint="Enter Name"
        android:inputType="textEmailAddress" />


    <!--button to register our new user-->

    <EditText
        android:id="@+id/idEdtPassword"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@id/idEdtUserName"
        android:layout_marginStart="10dp"
        android:layout_marginTop="173dp"
        android:layout_marginEnd="10dp"
        android:hint="Enter Password"
        android:inputType="textPassword" />

    <Button
        android:id="@+id/idBtnRegister"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@id/idEdtPassword"
        android:layout_marginStart="10dp"
        android:layout_marginTop="107dp"
        android:layout_marginEnd="10dp"
        android:text="Register "
        android:textAllCaps="false" />

</RelativeLayout>
```

3. Design an application for the login page using .xml file.

```
4. <?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"
       tools:context="com.razormist.simpleloginapplication.Login">


       <TextView
           android:id="@+id/tv_login"
           android:layout_width="wrap_content"
           android:layout_height="wrap_content"
           android:layout_alignParentLeft="true"
           android:layout_alignParentStart="true"
           android:layout_alignParentTop="true"
           android:layout_marginLeft="11dp"
           android:layout_marginStart="11dp"
           android:layout_marginTop="13dp"
           android:text="Login"
           android:fontFamily="sans-serif-condensed"
           android:textSize="30sp"/>
```

```xml
    <TextView
        android:id="@+id/tv_username"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignLeft="@+id/tv_login"
        android:layout_alignStart="@+id/tv_login"
        android:layout_below="@+id/tv_login"
        android:layout_marginTop="80dp"
        android:fontFamily="monospace"
        android:text="Username"
        android:textSize="25sp" />

    <EditText
        android:id="@+id/et_username"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/tv_username"
        android:ems="17"
        android:layout_alignLeft="@+id/tv_username" />


    <TextView
        android:id="@+id/tv_password"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignLeft="@+id/et_username"
        android:layout_alignStart="@+id/et_username"
        android:layout_below="@+id/et_username"
        android:layout_marginTop="33dp"
        android:fontFamily="monospace"
        android:text="Password"
        android:textSize="25sp" />

    <EditText
        android:id="@+id/et_password"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:inputType="textPassword"
        android:ems="17"
        android:layout_below="@+id/tv_password"
        android:layout_alignLeft="@+id/tv_password" />


    <Button
        android:id="@+id/btn_login"
        android:layout_height="wrap_content"
        android:layout_width="wrap_content"
        android:layout_below="@id/et_password"
        android:layout_centerInParent="true"
        android:ems="12"
        android:layout_marginTop="30dp"
        android:text="Login"/>


</RelativeLayout>
```
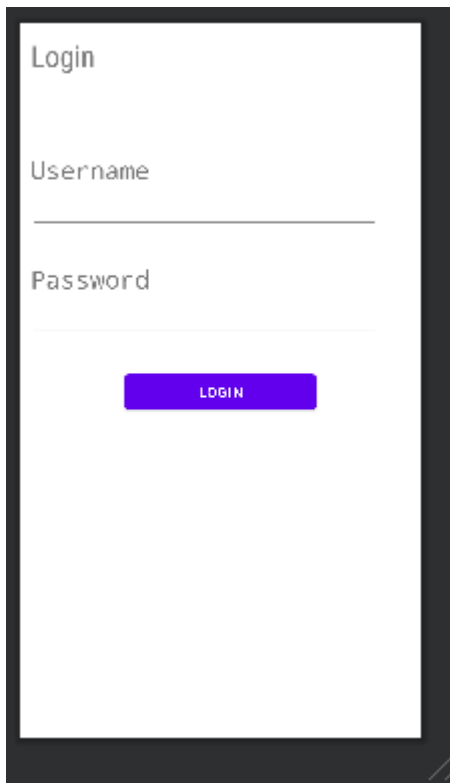
5. Develop your Profile page using .xml file.

6.

```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:layout_centerHorizontal="true"
    tools:context=".MainActivity">
    <TextView
        android:id="@+id/textview1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:text="Enter number 1"
        android:textSize="18sp" />
    <EditText
        android:id="@+id/first"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@id/textview1"
        android:layout_alignParentTop="false"
        android:layout_alignParentRight="false"
```

```xml
            android:layout_centerHorizontal="true"
            android:ems="10"
            android:inputType="number" />
    <TextView
            android:id="@+id/textView2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_below="@id/first"
            android:layout_centerHorizontal="true"
            android:text="Enter Number 2"
            android:textSize="18sp" />
    <EditText
            android:id="@+id/second"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_below="@id/textView2"
            android:layout_centerHorizontal="true"
            android:ems="10"
            android:inputType="number" />
    <Button
            android:id="@+id/buttonadd"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_below="@id/second"
            android:layout_centerHorizontal="true"
            android:text="Add" />
    <TextView
            android:id="@+id/result"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_below="@id/buttonadd"
            android:layout_centerHorizontal="true"
            android:textSize="24sp" />
</RelativeLayout>
```
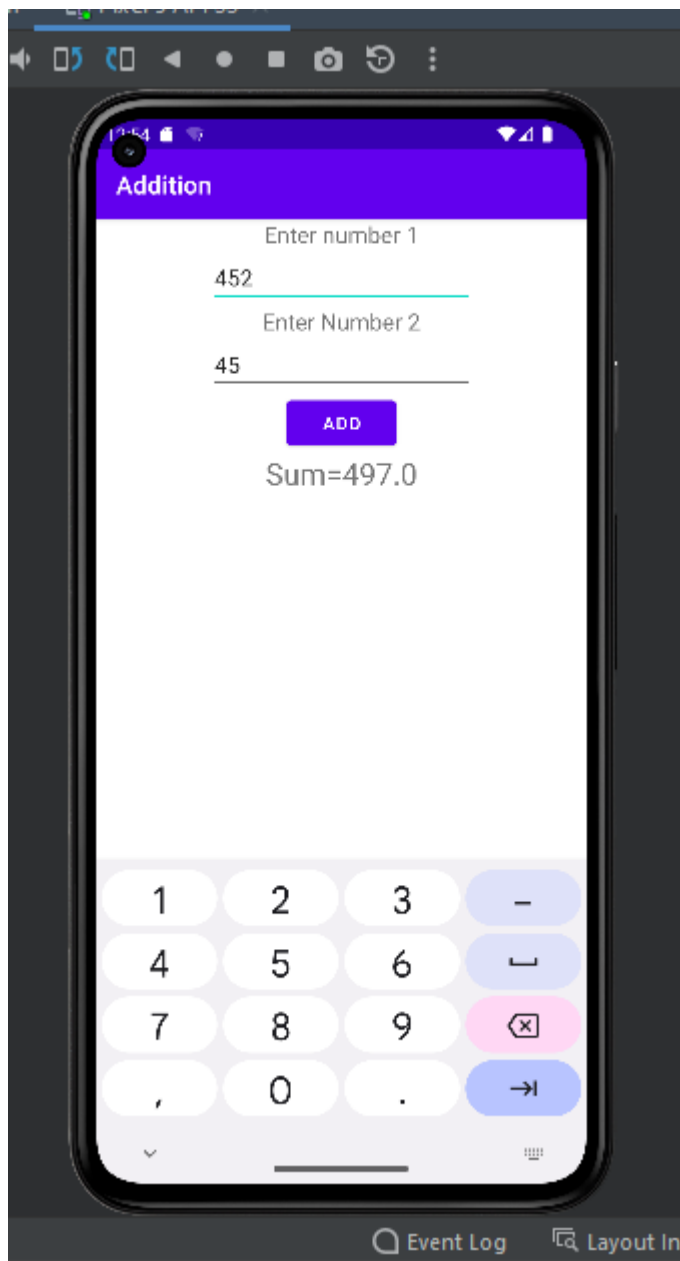
6.1

```java
package org.teachics.addition;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
public class MainActivity extends AppCompatActivity {
    EditText firstnum,secondnum;
    TextView r;
    Button bt;
    double a,b,c;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        firstnum=(EditText) findViewById(R.id.first);
        secondnum=(EditText) findViewById(R.id.second);
        bt=(Button) findViewById(R.id.buttonadd);
        r=(TextView) findViewById(R.id.result);
        bt.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
```

```java
            a=Double.parseDouble(firstnum.getText().toString());
            b=Double.parseDouble(secondnum.getText().toString());
            c=a+b;
            r.setText("Sum="+c);
        }
    });
    }
}
```

7.mainactivity.xml

```java
package org.teachics.lifecycle;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.util.Log;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Log.d("lifecycle","onCreate invoked");
    }

    @Override
    protected void onStart() {
        super.onStart();
        Log.d("lifecycle","onStart invoked");
    }

    @Override
    protected void onResume() {
        super.onResume();
        Log.d("lifecycle","onResume invoked");

    }

    @Override
    protected void onPause() {
        super.onPause();
        Log.d("lifecycle","onPause invoked");
    }

    @Override
    protected void onStop() {
        super.onStop();
        Log.d("lifecycle","onStop invoked");

    }

    @Override
    protected void onRestart() {
        super.onRestart();
        Log.d("lifecycle","onRestart invoked");

    }

    @Override
    protected void onDestroy() {
        super.onDestroy();
        Log.d("lifecycle","onDestroy invoked");
```

```
        }
}
```

8.facebook login

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="#3b5998"
    android:orientation="vertical">

    <!--Imageview for Facebook logo image-->
    <ImageView
        android:layout_width="80dp"
        android:layout_height="80dp"
        android:layout_gravity="center"
        android:layout_marginTop="80dp"
        android:src="@drawable/fb_logo" />

    <!--EditText for user name or email address-->
    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginLeft="20dp"
        android:layout_marginTop="80dp"
        android:layout_marginRight="20dp"
        android:backgroundTint="#d3d3d3"
        android:hint="Username or Email"
        android:inputType="textEmailAddress"
        android:maxLines="1"
        android:padding="10dp"
        android:textColor="#ffffff"
        android:textColorHint="#d3d3d3" />

    <!--EditText for user password-->
    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginLeft="20dp"
        android:layout_marginTop="10dp"
        android:layout_marginRight="20dp"
        android:backgroundTint="#d3d3d3"
        android:hint="Password"
        android:inputType="textPassword"
        android:maxLines="1"
        android:padding="10dp"
        android:textColor="#ffffff"
        android:textColorHint="#d3d3d3" />
```

```xml
    <!-- Login Button for Facebook Log In-->
    <Button
        android:id="@+id/btnLogin"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginLeft="20dp"
        android:layout_marginTop="35dp"
        android:layout_marginRight="20dp"
        android:backgroundTint="#5c6bc0"
        android:padding="10dp"
        android:text="Log In"
        android:textColor="#ffffff"
        android:textSize="16sp"
        android:textStyle="bold" />

    <RelativeLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent">

        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_alignParentBottom="true"
            android:orientation="vertical">

            <TextView
                android:id="@+id/txtSignUp"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center_horizontal"
                android:text="Sign Up for Facebook"
                android:textColor="#ffffff" />

            <TextView
                android:id="@+id/txtForgotPassword"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center_horizontal"
                android:layout_marginTop="15dp"
                android:layout_marginBottom="15dp"
                android:text="Forgot Password?"
                android:textColor="#ffffff" />
        </LinearLayout>

    </RelativeLayout>

</LinearLayout>
```