**Program-5 : Write a program to create an activity with two buttons START and STOP. On pressing of the START button, the activity must start the counter by displaying the numbers from One and the counter must keep on counting until the STOP button is pressed. Display the counter value in a TextViewcontrol.**

1) Firstly Create an Application by Name “CounterActivity”

2) Go to xml code of design change the layout to “RelativeLayout”

3) Add TextView component & change the following properties:

• Size: 38dp

• Text: “Counter Application”

• Center-Align

4) Add TextView component & change the following properties:

• Text: “Counter Value”

5) Add Button components & change the following properties:

• Size: 38dp

• Text: Start

• id: “@+id/btn\_start”

6) Add Button components & change the following properties:

• Size: 38dp

• Text: Stop

• id: “@+id/btn\_stop”

XML CODE

*<?*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=".MainActivity">  
 <TextView  
 android:id="@+id/textView1"  
 android:layout\_width="332dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginStart="41dp"  
 android:layout\_marginLeft="41dp"  
 android:layout\_marginEnd="38dp"  
 android:layout\_marginRight="38dp"  
 android:layout\_marginBottom="516dp"  
 android:text="Counter Application"  
 android:textSize="36sp"  
 android:textStyle="bold" />  
 <Button  
 android:id="@+id/button1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="236dp"  
 android:layout\_marginRight="236dp"  
 android:layout\_marginBottom="89dp"  
 android:text="Start"  
 android:textSize="30sp"  
 app:backgroundTint="#4CAF50" />  
 <Button  
 android:id="@+id/button2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="55dp"  
 android:layout\_marginRight="55dp"  
 android:layout\_marginBottom="92dp"  
 android:text="STOP"  
 android:textSize="30sp"  
 app:backgroundTint="#EC5449" />  
 <TextView  
 android:id="@+id/textView2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="165dp"  
 android:layout\_marginRight="165dp"  
 android:layout\_marginBottom="434dp"  
 android:text="counter value"  
 android:textSize="18sp"  
 android:textStyle="bold" />  
</RelativeLayout>

JAVA CODE

package com.example.progm5;  
import androidx.appcompat.app.AppCompatActivity;  
import android.os.Bundle;  
import android.os.Handler;  
import android.view.View;  
import android.widget.Button;  
import android.widget.TextView;  
public class MainActivity extends AppCompatActivity {  
 TextView txtCounter;  
 Button btn\_start,btn\_stop;  
 int count=0;  
 Handler customHandler=new Handler();  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 txtCounter = (TextView) findViewById(R.id.*textView2*);  
 btn\_start = (Button) findViewById(R.id.*button1*);  
 btn\_stop = (Button) findViewById(R.id.*button2*);  
 btn\_start.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 customHandler.postDelayed(updateTimerThread, 0);  
 }  
 });  
 btn\_stop.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 customHandler.removeCallbacks(updateTimerThread);  
 }  
 });  
 }  
 private final Runnable updateTimerThread =new Runnable() {  
 @Override  
 public void run() {  
 txtCounter.setText(""+count);  
 customHandler.postDelayed(this,1000);  
 count++;  
 }  
 };  
}

