```
package com.example.program5;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.os.Handler;
import android.os.Message;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
public class MainActivity extends AppCompatActivity implements
View.OnClickListener {
TextView lblCounter;
Button btnStart,btnStop;
int counter=0;
boolean running=false;
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity main);
lblCounter=(TextView)findViewById(R.id.lbl text);
btnStart=(Button)findViewById(R.id.btn start);
btnStop=(Button)findViewById(R.id.btn stop);
btnStop.setOnClickListener(this);
btnStart.setOnClickListener(this);
public void onClick(View v)
if(v.equals(btnStart))
counter=0;
running=true;
new MyCounter().start();
else if(v.equals(btnStop))
running=false;
Handler handler=new Handler()
public void handleMessage(Message m) {
lblCounter.setText(String.valueOf(m.what)); }
class MyCounter extends Thread
public void run()
while(running)
counter++;
handler.sendEmptyMessage(counter); try {
Thread.sleep(1000);
catch(Exception e)
```

```
activity.xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
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:id="@+id/lbl counter"
android:layout width="match parent"
android:layout height="match parent"
tools:context=".MainActivity">
<TextView
android:id="@+id/textView"
android:layout width="wrap content"
android:layout height="wrap content"
android:layout marginTop="100dp"
android:text="Counter Application"
android:textSize="30sp"
app:layout constraintEnd toEndOf="parent"
app:layout constraintStart toStartOf="parent"
app:layout constraintTop toTopOf="parent" />
<TextView
android:id="@+id/lbl text"
android:layout width="wrap content"
android:layout height="wrap content"
android:layout marginTop="30dp"
android:text="Counter Value"
android:textColor="@color/colorAccent"
android:textSize="50dp"
app:layout constraintEnd toEndOf="parent"
app:layout constraintStart toStartOf="parent"
app:layout constraintTop toBottomOf="@+id/textView"/>
<Button
android:id="@+id/btn start"
android:layout width="wrap content"
android:layout height="wrap content"
android:layout marginTop="20dp"
android:text="Start"
app:layout constraintEnd toEndOf="parent"
app:layout_constraintStart toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/lbl_text" />
<Button
android:id="@+id/btn stop"
android:layout width="wrap content"
android:layout height="wrap content"
android:layout marginTop="30dp"
android:text="Stop"
app:layout constraintEnd_toEndOf="parent"
app:layout constraintStart toStartOf="parent"
app:layout constraintTop toBottomOf="@+id/btn_start" />
</androidx.constraintlayout.widget.ConstraintLayout>
```