//Activity_main.xml

```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/main"

    android:layout_width="match_parent"

    android:layout_height="match_parent"

    tools:context=".MainActivity">


    <TextView

        android:id="@+id/textView"

        android:layout_width="182dp"

        android:layout_height="54dp"

        android:gravity="center"

        android:text="ProgressDialog"


        android:textSize="24sp"

        app:layout_constraintLeft_toLeftOf="parent"

        app:layout_constraintRight_toRightOf="parent"

        app:layout_constraintTop_toTopOf="parent" />
    <Button

        android:id="@+id/button"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_marginStart="159dp"

        android:layout_marginLeft="159dp"

        android:layout_marginTop="40dp"

        android:layout_marginEnd="159dp"

        android:layout_marginRight="159dp"
```

```
        android:text="Button"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toBottomOf="@+id/textView" />




</androidx.constraintlayout.widget.ConstraintLayout>
```

//MainActivity.java

```java
package com.example.progress;

import android.app.ProgressDialog;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

import java.util.Timer;
import java.util.TimerTask;

public class MainActivity extends AppCompatActivity implements View.OnClickListener {
    Button btn;
    ProgressDialog pd;
    int counter=0,max;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);
        btn=findViewById(R.id.button);
        btn.setOnClickListener(this);
    }

    @Override
```

```java
public void onClick(View v) {


    pd=new ProgressDialog(MainActivity.this);

    pd.setProgressStyle(ProgressDialog.STYLE_HORIZONTAL);
    pd.setMax(100);
    pd.setIndeterminate(false);
    pd.setTitle("Android Developers");
    pd.setMessage("Downloading File");
    pd.show();
    Timer t=new Timer();
    TimerTask tsk= new TimerTask() {
      public void run() {
        counter++;
        pd.setProgress(counter);
        if(counter==100)
        {
          t.cancel();
        }
      }
    };
    t.schedule(tsk,0,100);
  }
}
```