**AsyncTask Example (ProgressDialog)**

**activity\_main.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:gravity="center"  
 android:orientation="vertical">  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Async Task"  
 android:textSize="35dp"  
 android:textStyle="italic"  
 android:layout\_marginTop="50sp"  
 android:textColor="#000"/>  
  
 <Button  
 android:id="@+id/btn"  
 android:onClick="doSomething"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="70dp"  
 android:text="Open Progress Dailog"/>  
  
</LinearLayout>

**MainActivity.java**

package com.example.asynctask;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.View;  
  
public class MainActivity extends AppCompatActivity {  
  
 MyProgressTask p1;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 }  
  
 public void doSomething(View view) {  
 p1 = new MyProgressTask(this);  
 p1.execute();  
 }  
}

**MyProgressTask.java**

package com.example.asynctask;  
  
import android.app.ProgressDialog;  
import android.content.Context;  
import android.content.DialogInterface;  
import android.os.AsyncTask;  
import android.util.Log;  
import android.widget.Toast;  
  
public class MyProgressTask extends AsyncTask<Void, Integer, String> {  
  
 Context ctx;  
 ProgressDialog pd;  
  
 public MyProgressTask(Context ct){  
 ctx = ct;  
 }  
  
 @Override  
 protected void onPreExecute() {  
 pd = new ProgressDialog(ctx);  
 pd.setTitle("Downloading");  
 pd.setMax(10);  
 pd.setMessage("Please Wait...");  
 pd.setProgressStyle(ProgressDialog.*STYLE\_HORIZONTAL*);  
 pd.setButton(ProgressDialog.*BUTTON\_NEGATIVE*, "Cancle", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface, int i) {  
 dialogInterface.cancel();  
 }  
 });  
  
 pd.show();  
 }  
  
 @Override  
 protected String doInBackground(Void... voids) {  
 try {  
 for (int i = 0; i <= 10; i++) {  
  
 Thread.*sleep*(1000);  
 Log.*i*("Thread", "Execute " + i);  
 publishProgress(i);  
 }  
 return "Successful";  
 }  
 catch (InterruptedException e){  
 e.printStackTrace();  
 Log.*i*("Exception",e.getMessage());  
 return "Failure";  
 }  
 }  
  
 @Override  
 protected void onProgressUpdate(Integer... values) {  
 int myValue = values[0];  
 pd.setProgress(myValue);  
 }  
  
 @Override  
 protected void onPostExecute(String s) {  
 Toast.*makeText*(ctx, s, Toast.*LENGTH\_SHORT*).show();  
 pd.dismiss();  
 }  
}