package com.example.progress;  
  
import androidx.appcompat.app.AppCompatActivity;  
import android.app.ProgressDialog;  
import android.os.Handler;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
  
  
import android.os.Bundle;  
  
public class MainActivity extends AppCompatActivity {  
 Button btnStartProgress;  
 ProgressDialog progressBar;  
 private int progressBarStatus = 0;  
 private Handler progressBarHandler = new Handler();  
 private long fileSize = 0;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 addListenerOnButtonClick();  
 }  
 public void addListenerOnButtonClick() {  
 btnStartProgress = findViewById(R.id.*button1*);  
 btnStartProgress.setOnClickListener(new View.OnClickListener(){  
  
 @Override  
 public void onClick(View v) {  
 // creating progress bar dialog  
 progressBar = new ProgressDialog(v.getContext());  
 progressBar.setCancelable(true);  
 progressBar.setMessage("File downloading ...");  
 progressBar.setProgressStyle(ProgressDialog.*STYLE\_HORIZONTAL*);  
 progressBar.setProgress(0);  
 progressBar.setMax(100);  
 progressBar.show();  
 //reset progress bar and filesize status  
 progressBarStatus = 0;  
 fileSize = 0;  
  
 new Thread(new Runnable() {  
 public void run() {  
 while (progressBarStatus < 100) {  
 // performing operation  
 progressBarStatus = doOperation();  
 try {  
 Thread.*sleep*(1000);  
 } catch (InterruptedException e) {  
 e.printStackTrace();  
 }  
 // Updating the progress bar  
 progressBarHandler.post(new Runnable() {  
 public void run() {  
 progressBar.setProgress(progressBarStatus);  
 }  
 });  
 }  
 // performing operation if file is downloaded,  
 if (progressBarStatus >= 100) {  
 // sleeping for 1 second after operation completed  
 try {  
 Thread.*sleep*(1000);  
 } catch (InterruptedException e) {  
 e.printStackTrace();  
 }  
 // close the progress bar dialog  
 progressBar.dismiss();  
 }  
 }  
 }).start();  
 }//end of onClick method  
 });  
 }  
 // checking how much file is downloaded and updating the filesize  
 public int doOperation() {  
 //The range of ProgressDialog starts from 0 to 10000  
 while (fileSize <= 10000) {  
 fileSize++;  
 if (fileSize == 1000) {  
 return 10;  
 } else if (fileSize == 2000) {  
 return 20;  
 } else if (fileSize == 3000) {  
 return 30;  
 } else if (fileSize == 4000) {  
 return 40; // you can add more else if  
 }  
 /\* else {  
 return 100;  
 }\*/  
 }//end of while  
 return 100;  
 }  
}