**MAINACTIVITY.JAVA ::**

**package** com.example.asynctask;  
  
**import** android.app.ProgressDialog;  
**import** android.graphics.Bitmap;  
**import** android.graphics.BitmapFactory;  
**import** android.os.AsyncTask;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.ImageView;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
  
**import** java.io.IOException;  
**import** java.io.InputStream;  
**import** java.io.InputStreamReader;  
**import** java.net.HttpURLConnection;  
**import** java.net.MalformedURLException;  
**import** java.net.URL;  
  
**public class** MainActivity **extends** AppCompatActivity {  
  
 URL **ImageUrl** = **null**;  
 InputStream **is** = **null**;  
 Bitmap **bmImg** = **null**;  
 ImageView **imageView**= **null**;  
 ProgressDialog **p**;  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 Button button=findViewById(R.id.***asyncTask***);  
 **imageView**=findViewById(R.id.***image***);  
 button.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View v) {  
 AsyncTaskExample asyncTask=**new** AsyncTaskExample();  
 asyncTask.execute(**"https://www.tutorialspoint.com/images/tp-logo-diamond.png"**);  
 }  
 });  
 }  
 **private class** AsyncTaskExample **extends** AsyncTask<String, String, Bitmap> {  
 @Override  
 **protected void** onPreExecute() {  
 **super**.onPreExecute();  
 **p** = **new** ProgressDialog(MainActivity.**this**);  
 **p**.setMessage(**"Please wait...It is downloading"**);  
 **p**.setIndeterminate(**false**);  
 **p**.setCancelable(**false**);  
 **p**.show();  
 }  
 @Override  
 **protected** Bitmap doInBackground(String... strings) {  
 **try** {  
 **ImageUrl** = **new** URL(strings[0]);  
 HttpURLConnection conn = (HttpURLConnection) **ImageUrl**.openConnection();  
 conn.setDoInput(**true**);  
 conn.connect();  
 **is** = conn.getInputStream();  
 BitmapFactory.Options options = **new** BitmapFactory.Options();  
 options.**inPreferredConfig** = Bitmap.Config.***RGB\_565***;  
 **bmImg** = BitmapFactory.*decodeStream*(**is**, **null**, options);  
 } **catch** (IOException e) {  
 e.printStackTrace();  
 }  
 **return bmImg**;  
 }  
 @Override  
 **protected void** onPostExecute(Bitmap bitmap) {  
 **super**.onPostExecute(bitmap);  
 **if**(**imageView**!=**null**) {  
 **p**.hide();  
 **imageView**.setImageBitmap(bitmap);  
 }**else** {  
 **p**.show();  
 }  
 }  
 }  
}

ACTIVITY\_MAIN.XML ::

*<?***xml version = "1.0" encoding = "utf-8"***?>*<**LinearLayout xmlns:android = "http://schemas.android.com/apk/res/android"  
 xmlns:tools = "http://schemas.android.com/tools"  
 android:id = "@+id/rootview"  
 android:layout\_width = "match\_parent"  
 android:layout\_height = "match\_parent"  
 android:orientation = "vertical"  
 android:gravity = "center\_horizontal"  
 tools:context = ".MainActivity"**>  
 <**Button  
 android:id = "@+id/asyncTask"  
 android:text = "Download"  
 android:layout\_width = "wrap\_content"  
 android:layout\_height = "wrap\_content"** />  
 <**ImageView  
 android:id = "@+id/image"  
 android:layout\_width = "300dp"  
 android:layout\_height = "300dp"** />  
</**LinearLayout**>

ANDROID\_MANIFEST.XML ::

*<?***xml version="1.0" encoding="utf-8"***?>*<**manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 package="com.example.asynctask"**>  
<**uses-permission android:name="android.permission.INTERNET"**/>  
 <**application  
 android:allowBackup="true"  
 android:icon="@mipmap/ic\_launcher"  
 android:label="@string/app\_name"  
 android:roundIcon="@mipmap/ic\_launcher\_round"  
 android:supportsRtl="true"  
 android:theme="@style/AppTheme"**>  
 <**activity android:name=".MainActivity"**>  
 <**intent-filter**>  
 <**action android:name="android.intent.action.MAIN"** />  
  
 <**category android:name="android.intent.category.LAUNCHER"** />  
 </**intent-filter**>  
 </**activity**>  
 </**application**>  
  
</**manifest**>