**package** course.examples.Threading.ThreadingAsyncTask;  
**import** android.app.Activity;  
**import** android.graphics.Bitmap;  
**import** android.graphics.BitmapFactory;  
**import** android.os.AsyncTask;  
**import** android.os.Bundle;  
**import** android.util.Log;  
**import** android.view.View;  
**import** android.view.View.OnClickListener;  
**import** android.widget.Button;  
**import** android.widget.ImageView;  
**import** android.widget.ProgressBar;  
**import** android.widget.Toast;  
**public class** AsyncTaskActivity **extends** Activity {  
   
 **private final static** String ***TAG*** = **"ThreadingAsyncTask"**;  
   
 **private** ImageView **mImageView**;  
 **private** ProgressBar **mProgressBar**;  
 **private int mDelay** = 500;  
   
 @Override  
 **public void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***main***);  
 **mImageView** = (ImageView) findViewById(R.id.***imageView***);;  
 **mProgressBar** = (ProgressBar) findViewById(R.id.***progressBar***);  
   
 **final** Button button = (Button) findViewById(R.id.***loadButton***);  
 button.setOnClickListener(**new** OnClickListener() {  
 **public void** onClick(View v) {  
 **new** LoadIconTask().execute(R.drawable.painter);  
 }  
 });  
   
 **final** Button otherButton = (Button) findViewById(R.id.otherButton);  
 otherButton.setOnClickListener(**new** OnClickListener() {  
 @Override  
 **public void** onClick(View v) {  
 Toast.makeText(AsyncTaskActivity.**this**, **"I'm Working"**,  
 Toast.LENGTH\_SHORT).show();  
 }  
 });  
 }  
 **class** LoadIconTask **extends** AsyncTask<Integer, Integer, Bitmap> {  
 @Override  
 **protected void** onPreExecute() {  
 **mProgressBar**.setVisibility(ProgressBar.***VISIBLE***);  
 }  
 @Override  
 **protected** Bitmap doInBackground(Integer... resId) {  
 Bitmap tmp = BitmapFactory.*decodeResource*(getResources(), resId[0]);  
 *// simulating long-running operation*   
 **for** (**int** i = 1; i < 11; i++) {  
 sleep();  
 publishProgress(i \* 10);  
 }  
 **return** tmp;  
 }  
 @Override  
 **protected void** onProgressUpdate(Integer... values) {  
 **mProgressBar**.setProgress(values[0]);  
 }  
 @Override  
 **protected void** onPostExecute(Bitmap result) {  
 **mProgressBar**.setVisibility(ProgressBar.***INVISIBLE***);  
 **mImageView**.setImageBitmap(result);  
 }  
 **private void** sleep() {  
 **try** {  
 Thread.*sleep*(**mDelay**);  
 } **catch** (InterruptedException e) {  
 Log.*e*(***TAG***, e.toString());  
 }  
 }  
 }  
}

*<?***xml version="1.0" encoding="utf-8"***?>*  
<**LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"**  
 **android:layout\_width="match\_parent"**  
 **android:layout\_height="match\_parent"**  
 **android:orientation="vertical"** >  
 <**ImageView**  
 **android:id="@+id/imageView"**  
 **android:layout\_width="400dp"**  
 **android:layout\_height="340dp"**  
 **android:scaleType="centerInside"** >  
 </**ImageView**>  
 <**ProgressBar**  
 **android:id="@+id/progressBar"**  
 **style="@android:style/Widget.ProgressBar.Horizontal"**  
 **android:layout\_width="fill\_parent"**  
 **android:layout\_height="wrap\_content"**  
 **android:maxHeight="5dip"**  
 **android:minHeight="5dip"**  
 **android:visibility="invisible"** >  
 </**ProgressBar**>  
 <**Button**  
 **android:id="@+id/loadButton"**  
 **android:layout\_width="wrap\_content"**  
 **android:layout\_height="wrap\_content"**  
 **android:text="Load Icon"**  
 **android:textSize="24sp"** >  
 </**Button**>  
 <**Button**  
 **android:id="@+id/otherButton"**  
 **android:layout\_width="wrap\_content"**  
 **android:layout\_height="wrap\_content"**  
 **android:text="Other Button"**  
 **android:textSize="24sp"** >  
 </**Button**>  
</**LinearLayout**>