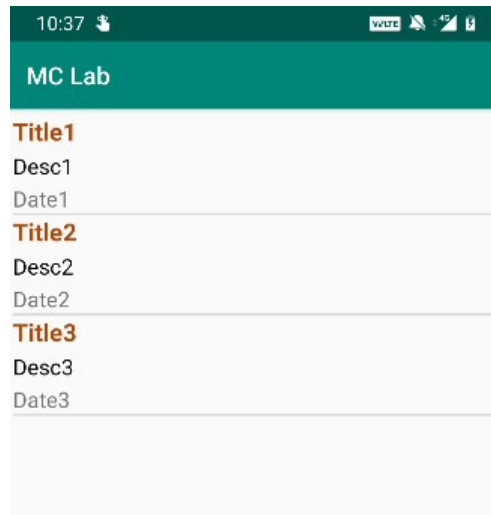Ex 6 – RSS feed reader


```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context="cocomo.lab.ex6_main">

    <ListView
        android:id="@+id/lv_rss"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:dividerHeight="2dp"
        android:padding="5dp"/>

</RelativeLayout>
```

```java
package cocomo.lab;
import android.app.ProgressDialog;
import android.os.AsyncTask;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import android.widget.Toast;
import org.xmlpull.v1.XmlPullParser;
```

```java
import org.xmlpull.v1.XmlPullParserFactory;
import java.io.IOException;
import java.io.InputStream;
import java.net.URL;
import java.util.ArrayList;
public class ex6_main extends AppCompatActivity {
    ListView lv_rss;
    ArrayList<rssFeed> arr;
    listViewAdapter adapter;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.ex6_main);
        lv_rss=findViewById(R.id.lv_rss);
        arr=new ArrayList<rssFeed>();
        adapter=new listViewAdapter(this,arr);
        new parseFeed().execute();
        lv_rss.setOnItemClickListener(new AdapterView.OnItemClickListener() {
            @Override
            public void onItemClick(AdapterView<?> parent, View view, int position,
long id) {
                rssFeed rs=(rssFeed)parent.getItemAtPosition(position);
                Toast.makeText(ex6_main.this, rs.getTitle(),
Toast.LENGTH_SHORT).show();
            }
        });
    }
    public class parseFeed extends AsyncTask<Void,Void,Void>{
        @Override
        protected Void doInBackground(Void... voids) {
            try {
                InputStream is = getAssets().open("sample.xml");
                XmlPullParser xp=XmlPullParserFactory.newInstance().newPullParser();
                xp.setInput(is,"UTF-8");
                int event=xp.getEventType();
                String title="",desc="",date="";
                while(event!=XmlPullParser.END_DOCUMENT){
                    if(event==XmlPullParser.START_TAG){
                        if(xp.getName().equals("title"))
                            title=xp.nextText();
                        else if(xp.getName().equals("description"))
                            desc=xp.nextText();
                        else if(xp.getName().equals("pubDate")) {
                            date = xp.nextText();
                            adapter.add(new rssFeed(title,desc,date));
                        }
                    }
                    event=xp.nextTag();
                }
            }
            catch (Exception e){
                e.printStackTrace();
            }
            return null;
        }
        @Override
        protected void onPostExecute(Void aVoid) {
            super.onPostExecute(aVoid);
            lv_rss.setAdapter(adapter);
        }
    }
}
```

Ex 7. Progress bar and progress dialog

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context="cocomo.lab.ex7_main">
    <EditText
        android:id="@+id/et_time"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="time (in secs)"
        android:inputType="number"/>
    <Button
        android:id="@+id/bt_sleep"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/et_time"
        android:text="SLEEP"
        android:layout_centerHorizontal="true"/>
    <ProgressBar
        android:id="@+id/pbar"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/bt_sleep"
        android:layout_marginLeft="50dp"
        android:layout_marginRight="50dp"
        style="@style/Widget.AppCompat.ProgressBar.Horizontal"/>
    <Button
        android:id="@+id/bt_start"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/pbar"
        android:text="START"
        android:layout_centerHorizontal="true"/>
</RelativeLayout>
```

```java
package cocomo.lab;
import android.app.ProgressDialog;
import android.content.res.ColorStateList;
import android.graphics.Color;
import android.os.Build;
import android.os.Handler;
import android.support.annotation.RequiresApi;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.ProgressBar;
public class ex7_main extends AppCompatActivity {
    ProgressBar pbar;
    Handler handler;
    int i;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.ex7_main);
        Button bt_sleep=findViewById(R.id.bt_sleep);
        final Button bt_start=findViewById(R.id.bt_start);
```

```java
        pbar=findViewById(R.id.pbar);
        handler=new Handler();
        bt_sleep.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                final ProgressDialog pd=new ProgressDialog(ex7_main.this);
                pd.setTitle("Sleep in Progress");
                pd.setMessage("Started");
                pd.show();
                EditText et_time=findViewById(R.id.et_time);
                int count=Integer.parseInt(et_time.getEditableText().toString());
                new Handler().postDelayed(new Runnable() {
                    @Override
                    public void run() {
                        pd.dismiss();
                    }
                },count*1000);
            }
        });
        bt_start.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                new Thread(new Runnable() {
                    @Override
                    public void run() {
                        for(i=0;i<=100;i+=10){
                            if(i==100){
                                handler.post(new Runnable() {
                                    @Override
                                    public void run() {

pbar.setProgressTintList(ColorStateList.valueOf(Color.GREEN));
                                        bt_start.setText("FINISH");
                                    }
                                });
                            }
                            pbar.setProgress(i);
                            try{
                                Thread.sleep(100);
                            }
                            catch (Exception e){
                                e.printStackTrace();
                            }
                        }
                    }
                }).start();
            }
        });
    }
}
```