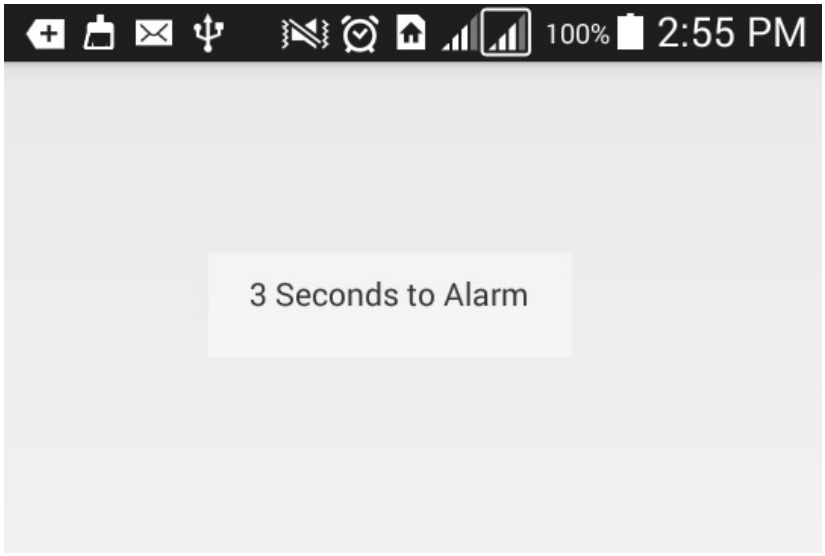
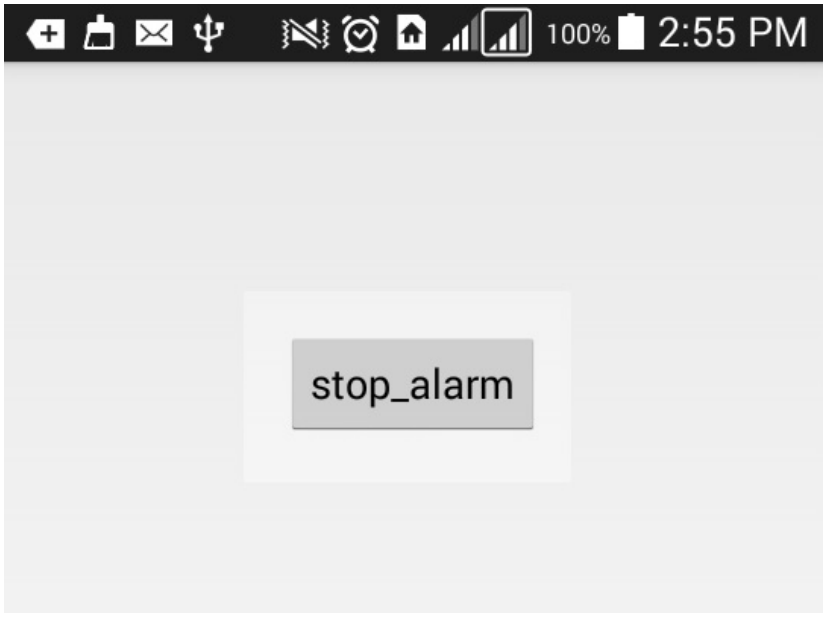
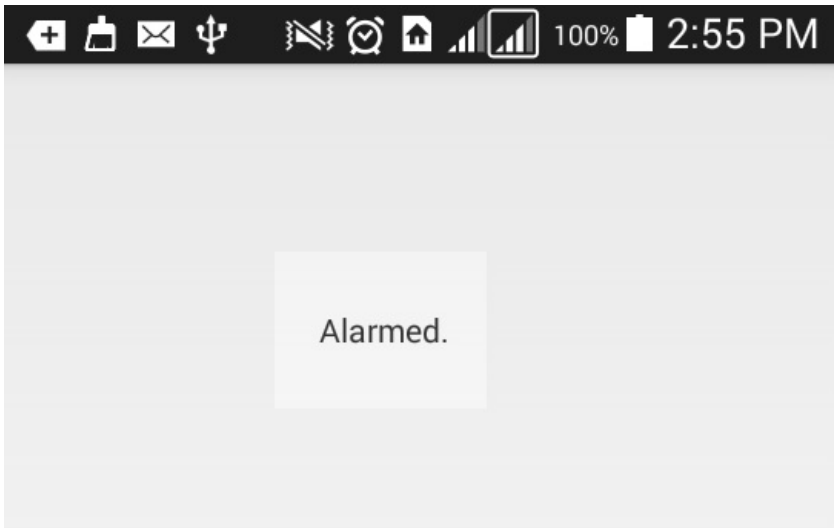

100%
2:55 PM
3 Seconds to Alarm


100%
2:55 PM
stop_alarm


100%
2:55 PM
Alarmed.

AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.alarm_final"
    android:versionCode="1"
    android:versionName="1.0" >
    <uses-sdk
        android:minSdkVersion="8"
        android:targetSdkVersion="17" />
    <application
        android:allowBackup="true"
        android:icon="@drawable/ic_launcher"
        android:label="@string/app_name"
        android:theme="@style/AppTheme" >
        <activity
            android:name="com.example.alarm_final.MainActivity"
            android:label="@string/app_name" >
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity
            android:name="com.example.alarm_final.AlarmReceiverActivity"
            android:label="@string/title_activity_alarm_receiver" >
        </activity>
    </application>   </manifest>
```

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@+id/rl1"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:gravity="center"
    android:orientation="vertical" >
     <TextView
        android:id="@+id/test"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="alarm_hello" />
 </RelativeLayout>
```

MainActivity.java

```
package com.example.alarm_final;
import java.util.Calendar;
import android.app.Activity;
import android.app.AlarmManager;
import android.app.PendingIntent;
import android.content.Intent;
import android.os.Bundle;
import android.os.Handler;
import android.view.MotionEvent;
import android.view.View;
import android.view.Window;
import android.view.View.OnTouchListener;
import android.widget.RelativeLayout;
```

```
import android.widget.TextView;

public class MainActivity extends Activity implements OnTouchListener {
	private TextView tv;
	private static final int t1 = 1;
	private static final int finished = 2;
	private static int counter=4;// Current second is 5th second
	//private static Bundle b;
	@Override
	public void onCreate(Bundle savedInstanceState) {
		super.onCreate(savedInstanceState);
		//this.b=savedInstanceState;
		this.requestWindowFeature(Window.FEATURE_NO_TITLE);
		setContentView(R.layout.activity_main);

		final RelativeLayout rl = (RelativeLayout) findViewById(R.id.rl1);
		tv = (TextView)findViewById(R.id.test);
		rl.setOnTouchListener(this);
		// Create an offset from the current time in which the alarm will go
		// off.
		Calendar cal = Calendar.getInstance();
		cal.add(Calendar.SECOND, 5);
		tv.setText("Alarm in 5 Seconds");
		// Create a new PendingIntent and add it to the AlarmManager
		Intent intent = new Intent(this, AlarmReceiverActivity.class);
		//startActivity(intent);
PendingIntent pendingIntent = PendingIntent.getActivity(this, 12345, intent,
PendingIntent.FLAG_CANCEL_CURRENT);
		//pending intent means gets an intent and waits to trigger ro start
```

```
        AlarmManager am = (AlarmManager)
getSystemService(Activity.ALARM_SERVICE);
        am.set(AlarmManager.RTC_WAKEUP, cal.getTimeInMillis(), pendingIntent);
        //AlarmManager.RTC_WAKEUP  -- if an application is in closed state, at that
time also the activity is triggered.
        //RTC - real time clock
            startthread(getWindow().getDecorView().getRootView());
    }
    public void startthread(View v){
        tv.setText("Start Running");
        thread1.start();
    }

    Thread thread1 = new Thread(new Runnable() {
        @Override
        public void run() {
            for (int i = 0; i < 5; i++)
                {
                try {
                    Thread.sleep(1000);
                    } catch (InterruptedException e) {
                            e.printStackTrace();
                    }
                if(counter>0)
                    {handler.sendEmptyMessage(t1);}
                else{handler.sendEmptyMessage(finished);}
                }
        }
        });
```

```
        Handler handler = new Handler() {
                public void handleMessage(android.os.Message msg) {
        if(msg.what == t1) { tv.setText((counter--)+" Seconds to Alarm");}
        if(msg.what == finished) { tv.setText("Alarmed.");          }
                                }               };
public boolean onTouch(View v, MotionEvent event) {
      int action = event.getAction();
      switch(action){
         case MotionEvent.ACTION_DOWN:
                Calendar cal1 = Calendar.getInstance();
                cal1.add(Calendar.SECOND, 5);
                Intent intent1 = new Intent(this, AlarmReceiverActivity.class);
                PendingIntent pendingIntent1 = PendingIntent.getActivity(this, 12345,intent1,
PendingIntent.FLAG_CANCEL_CURRENT);
                AlarmManager am = (AlarmManager)
getSystemService(Activity.ALARM_SERVICE);
                am.set(AlarmManager.RTC_WAKEUP, cal1.getTimeInMillis(), pendingIntent1);
                Thread t1 = new Thread(thread1);
                counter = 4; // Current second is 5th second
                t1.start();
         break;
      }
      return true;
   }


}
```