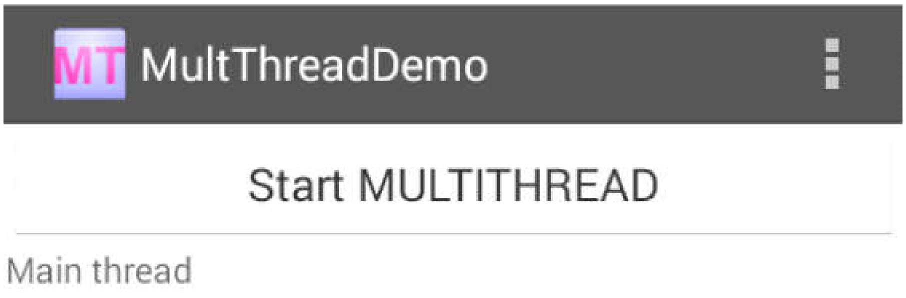
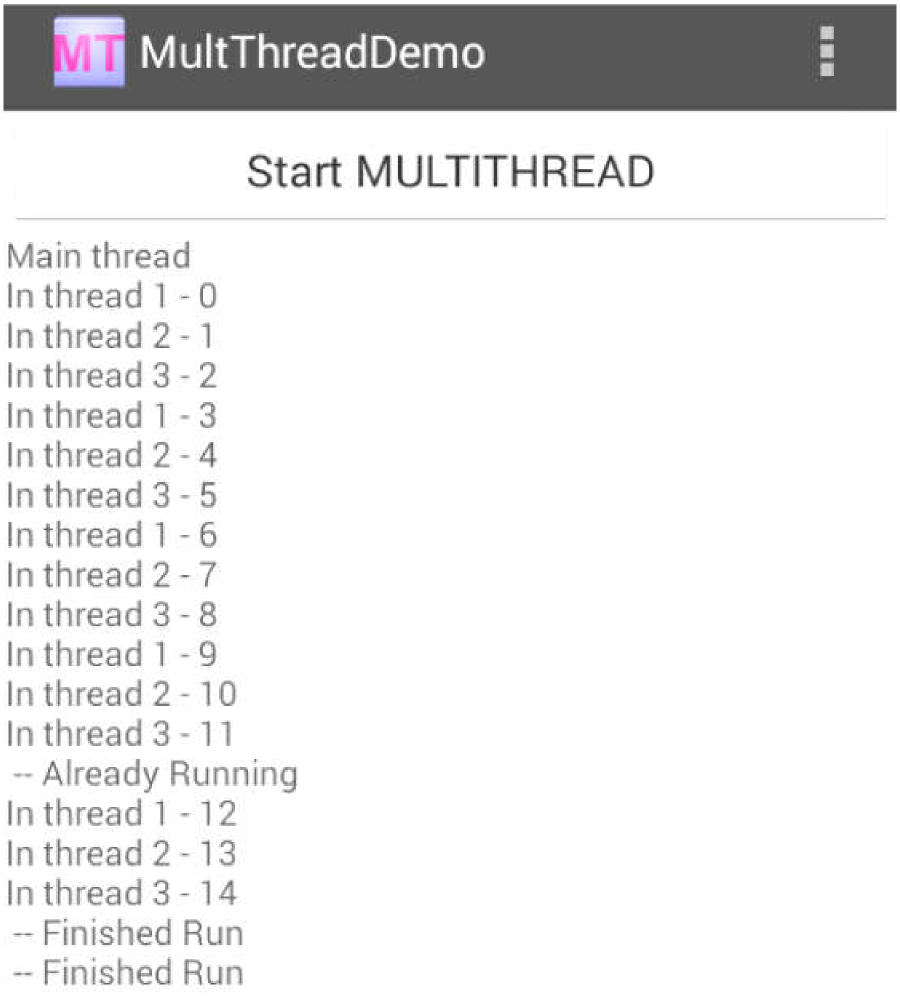


```
Main thread
```



```
Main thread
In thread 1 - 0
In thread 2 - 1
In thread 3 - 2
In thread 1 - 3
In thread 2 - 4
In thread 3 - 5
In thread 1 - 6
In thread 2 - 7
In thread 3 - 8
In thread 1 - 9
In thread 2 - 10
In thread 3 - 11
 -- Already Running
In thread 1 - 12
In thread 2 - 13
In thread 3 - 14
 -- Finished Run
 -- Finished Run
```

activity_main.xml

```
<?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"
                        android:id="@+id/info" >
    <Button
                android:id="@+id/button1"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:onClick="fetchData"
                android:text="Start MULTITHREAD" />
    <TextView
                android:id="@+id/textView1"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Main thread" />
</LinearLayout>
```

MainActivity.java

```
package com.example.multthreaddemo;
import android.app.Activity;
import android.os.Bundle;
import android.os.Handler;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.TextView;
public class MainActivity extends Activity {
```

```
private TextView tvOutput;
private static final int t1 = 1;
private static final int t2 = 2;
private static final int t3 = 3;
private static int counter=0;
private boolean start=true;
private static int ft=0;
@Override
protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        tvOutput = (TextView) findViewById(R.id.textView1);
        //below initializations are useful when the application restarts or resumes.
        counter =0;
        start = true;
        ft=0;
}
public void fetchData(View v) {
        if(start){
                tvOutput.setText("Main thread");
                thread1.start();
                thread2.start();
                thread3.start();
                start=false;
        }else{
                if(ft!=3)
                {tvOutput.append("\n -- Already Running");}
                else{tvOutput.append("\n -- Finished Run");}
                }
        }
        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();
                        }
                handler.sendEmptyMessage(t1);
                }
        ft++;
        }
});
Thread thread2 = new Thread(new Runnable() {
@Override
public void run() {
        for (int i = 0; i < 5; i++)
                {
                try {
                        Thread.sleep(1000);
                        } catch (InterruptedException e) {
                                                e.printStackTrace();
                                                }
                handler.sendEmptyMessage(t2);
                }
        ft++;
        }
});
Thread thread3 = new Thread(new Runnable() {
@Override
```

```
        public void run() {
                for (int i = 0; i < 5; i++)
                {
                try {
                    Thread.sleep(1000);
                    } catch (InterruptedException e) {
                            e.printStackTrace();
                            }
                handler.sendEmptyMessage(t3);
                }
            ft++;
            }
        });
    Handler handler = new Handler() {
    public void handleMessage(android.os.Message msg) {
        if(msg.what == t1) {
        tvOutput.append("\nIn thread 1"+" - "+(counter++));
                  }
        if(msg.what == t2) {
        tvOutput.append("\nIn thread 2"+" - "+(counter++));
                    }
        if(msg.what == t3) {
        tvOutput.append("\nIn thread 3"+" - "+(counter++));
                }


            }
                    };
}
```