Lab 3

3.1 Create a simple activity "Activity A"

```java
package com.example.pok.week3;
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.util.Log;
import android.view.View;
import android.widget.Button;

public class ActivityA extends AppCompatActivity {

    String msg1 = "Lab3";
    String msg2 = "Activity A : ";
    Button button;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_a);
        Log.d(msg1, msg2 + "onCreate");
        button = (Button)findViewById(R.id.button);
        button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent intent = new Intent(getApplicationContext(),ActivityB.class);
                startActivity(intent);
            }
        });
    }

    @Override
    protected void onStart() {
        super.onStart();
        Log.d(msg1, msg2+"onStart");
    }

    /** Called when the activity has become visible. */
    @Override
    protected void onResume() {
        super.onResume();
        Log.d(msg1, msg2+"onResume");
    }
    /** Called when another activity is taking focus. */
```

```java
    @Override
    protected void onPause() {
        super.onPause();
        Log.d(msg1, msg2+"onPause");
    }
    /** Called when the activity is no longer visible. */
    @Override
    protected void onStop() {
        super.onStop();
        Log.d(msg1, msg2+"onStop");
    }

    @Override
    public void onDestroy() {
        super.onDestroy();
        Log.d(msg1, msg2+"onDestroy");
    }
}
```
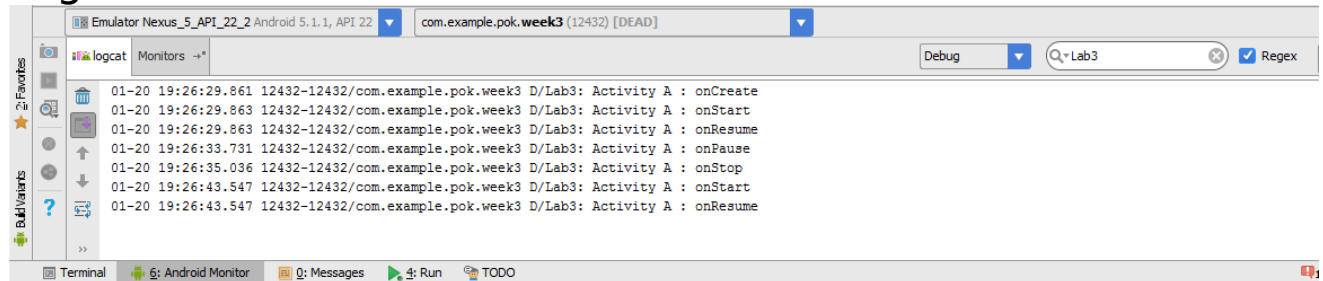
activity_a.xml

```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:id="@+id/activity_main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context="com.example.pok.week3.ActivityA">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Activity A"
        android:id="@+id/textView" />
    <Button
        android:text="Button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/textView"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="162dp"
        android:id="@+id/button" />
</RelativeLayout>
```
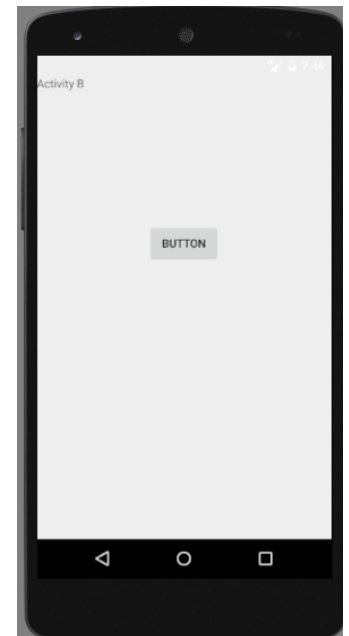
Log data


```
        01-20 19:26:29.861 12432-12432/com.example.pok.week3 D/Lab3: Activity A : onCreate
        01-20 19:26:29.863 12432-12432/com.example.pok.week3 D/Lab3: Activity A : onStart
        01-20 19:26:29.863 12432-12432/com.example.pok.week3 D/Lab3: Activity A : onResume
        01-20 19:26:33.731 12432-12432/com.example.pok.week3 D/Lab3: Activity A : onPause
        01-20 19:26:35.036 12432-12432/com.example.pok.week3 D/Lab3: Activity A : onStop
        01-20 19:26:43.547 12432-12432/com.example.pok.week3 D/Lab3: Activity A : onStart
        01-20 19:26:43.547 12432-12432/com.example.pok.week3 D/Lab3: Activity A : onResume
```

3.2 Create a simple activity "Activity B" called by "Activity A"

```java
package com.example.pok.week3;
import android.content.Intent;
import android.os.Bundle;
import android.support.v7.app.AppCompatActivity;
import android.util.Log;
import android.view.View;
import android.widget.Button;

public class ActivityB extends AppCompatActivity {
    String msg1 = "Lab3";
    String msg2 = "Activity B : ";
    Button button;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_b);
        Log.d(msg1, msg2 + "onCreate");
        button = (Button)findViewById(R.id.button);
        button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent intent = new Intent(getApplicationContext(),ActivityA.class);
                startActivity(intent);
            }
        });
    }

    @Override
    protected void onStart() {
        super.onStart();
```

```java
            Log.d(msg1, msg2+"onStart");
        }
        /** Called when the activity has become visible. */
        @Override
        protected void onResume() {
            super.onResume();
            Log.d(msg1, msg2+"onResume");
        }
        /** Called when another activity is taking focus. */
        @Override
        protected void onPause() {
            super.onPause();
            Log.d(msg1, msg2+"onPause");
        }
        /** Called when the activity is no longer visible. */
        @Override
        protected void onStop() {
            super.onStop();
            Log.d(msg1, msg2+"onStop");
        }

        @Override
        public void onDestroy() {
            super.onDestroy();
            Log.d(msg1, msg2+"onDestroy");
        }
    }
```

activity_b.xml

```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:id="@+id/activity_main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context="com.example.pok.week3.ActivityA">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
```

```xml
        android:text="Activity A"
        android:id="@+id/textView" />

    <Button
        android:text="Button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/textView"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="162dp"
        android:id="@+id/button" />

</RelativeLayout>
```

Exercise

1. Implement & Experiment Activity C called from Activity B
2. Implement the MapLocation App as shown in Lec3 slide on Page 10.

Insert `<uses-permission android:name="android.permission.INTERNET" />`
into AndroidManifest.xml (above `<application>`)

      a.