

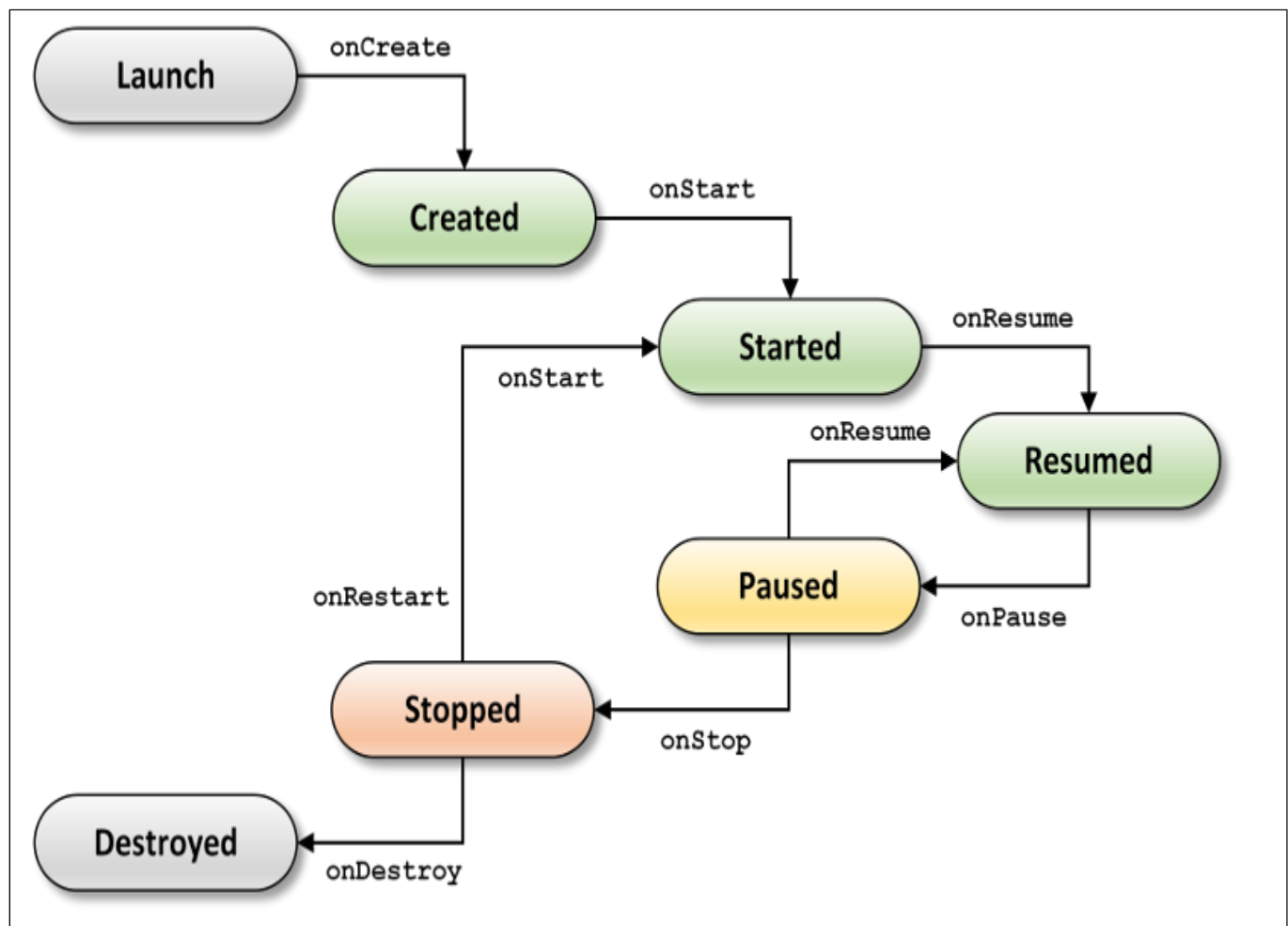
Practical 3

Programming Activities and fragments

Activity Life Cycle, Activity methods, Multiple Activities, Life Cycle of fragments and multiple fragments.

a) Activity Life Cycle

The various methods to be created are `onStart()`, `onRestart()`, `onStop()`, `onResume()`, `onDestroy()` and `onPause()` as shown in the figure.



Create a new project and go to, **MainActivity.java**

```
package MaharashtraCollege.example.profshahidansari;

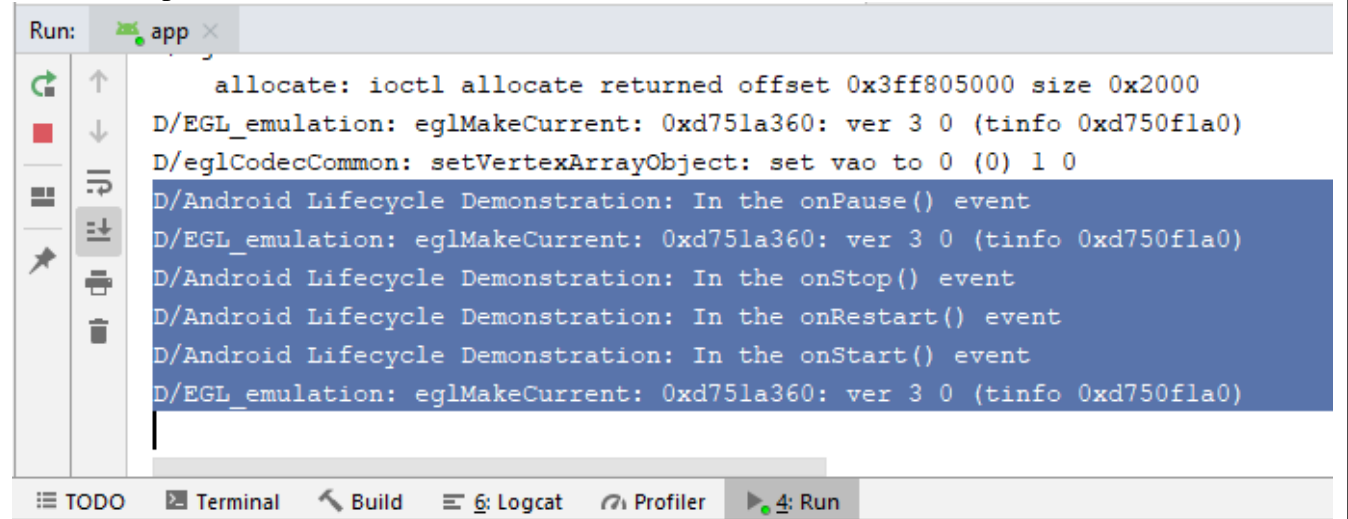
import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.util.Log;
public class MainActivity extends AppCompatActivity {

    String tag= "Android Lifecycle Demonstration";
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Log.d(tag,"In the onCreate() event");
    }
    public void onStart()
    {
        super.onStart();
        Log.d(tag,"In the onStart() event");
    }
    public void onRestart()
    { super.onRestart();
        Log.d(tag,"In the onRestart() event");
    }
    public void onPause()
    {
        super.onPause();
        Log.d(tag,"In the onPause() event");
    }
    public void onStop()
    {
        super.onStop();
        Log.d(tag,"In the onStop() event");
    }
    public void onDestroy()
    {
        super.onDestroy();
        Log.d(tag,"In the onDestroy() event");
    }
}
```

Output

See the Output in Run tab



The screenshot shows the Android Studio interface with the Run tab selected. The top bar indicates 'Run: app'. The logcat window displays the following output:

```
allocate: ioctl allocate returned offset 0x3ff805000 size 0x2000
D/EGL_emulation: eglMakeCurrent: 0xd751a360: ver 3 0 (tinfo 0xd750fla0)
D/eglCodecCommon: setVertexArrayObject: set vao to 0 (0) 1 0
D/Android Lifecycle Demonstration: In the onPause() event
D/EGL_emulation: eglMakeCurrent: 0xd751a360: ver 3 0 (tinfo 0xd750fla0)
D/Android Lifecycle Demonstration: In the onStop() event
D/Android Lifecycle Demonstration: In the onRestart() event
D/Android Lifecycle Demonstration: In the onStart() event
D/EGL_emulation: eglMakeCurrent: 0xd751a360: ver 3 0 (tinfo 0xd750fla0)
```

The bottom toolbar shows the following tabs: TODO, Terminal, Build, Logcat, Profiler, and Run (which is currently active).