

Practical No. 1

Aim: Write an Android program to demonstrate lifecycle of an Activity.

MainActivity.kt

```
package com.example.lifecycle
```

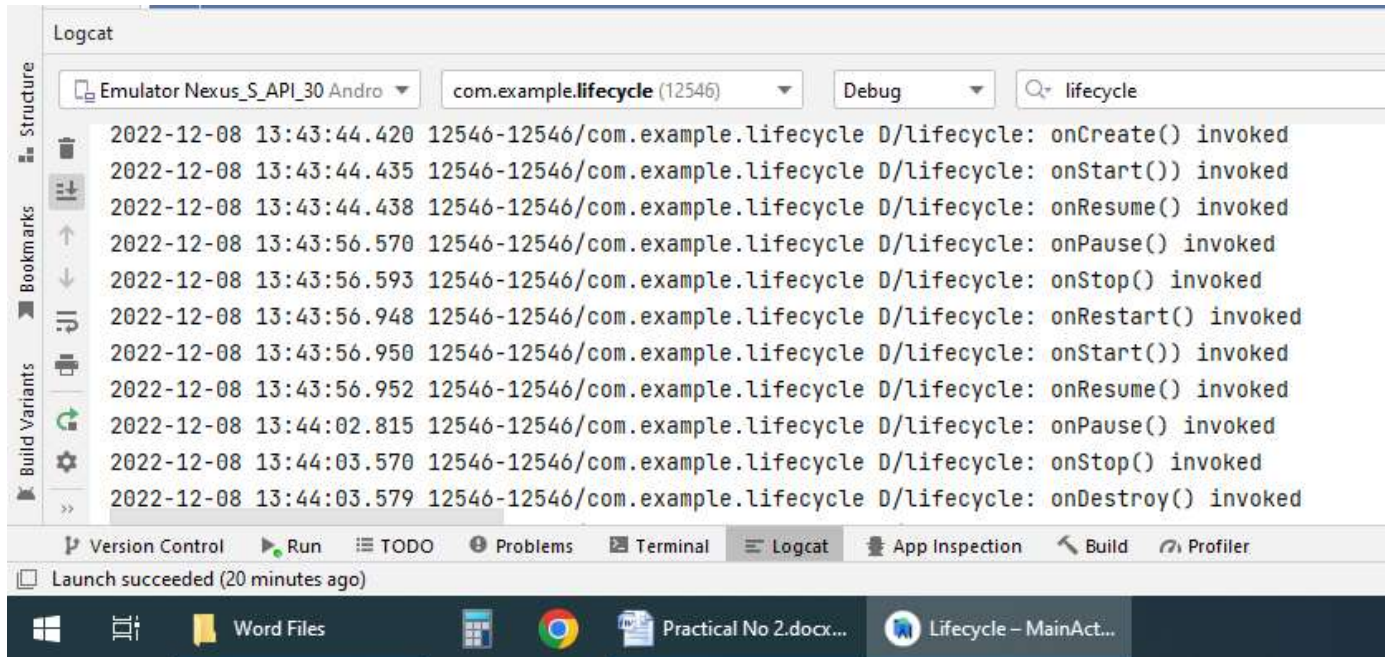
```
import androidx.appcompat.app.AppCompatActivity
```

```
import android.os.Bundle
```

```
import android.util.Log
```

```
class MainActivity : AppCompatActivity() {  
    override fun onCreate(savedInstanceState: Bundle?) {  
        super.onCreate(savedInstanceState)  
        setContentView(R.layout.activity_main)  
        Log.d("lifecycle", "onCreate() invoked")  
    }  
  
    override fun onStart() {  
        super.onStart()  
        Log.d("lifecycle", "onStart() invoked");  
    }  
  
    override fun onRestart() {  
        super.onRestart()  
        Log.d("lifecycle", "onRestart() invoked");  
    }  
  
    override fun onResume() {  
        super.onResume()  
        Log.d("lifecycle", "onResume() invoked");  
    }  
  
    override fun onPause() {  
        super.onPause()  
        Log.d("lifecycle", "onPause() invoked");  
    }  
  
    override fun onStop() {  
        super.onStop()  
        Log.d("lifecycle", "onStop() invoked");  
    }  
  
    override fun onDestroy() {  
        super.onDestroy()  
        Log.d("lifecycle", "onDestroy() invoked");  
    }  
}
```

Output:



The screenshot displays the Logcat window in an Android Studio emulator. The top bar shows the emulator name "Emulator Nexus_S_API_30 Andro", the package name "com.example.lifecycle (12546)", the debug level "Debug", and a search filter "lifecycle". The log entries show the following sequence of events:

- 2022-12-08 13:43:44.420 12546-12546/com.example.lifecycle D/lifecycle: onCreate() invoked
- 2022-12-08 13:43:44.435 12546-12546/com.example.lifecycle D/lifecycle: onStart() invoked
- 2022-12-08 13:43:44.438 12546-12546/com.example.lifecycle D/lifecycle: onResume() invoked
- 2022-12-08 13:43:56.570 12546-12546/com.example.lifecycle D/lifecycle: onPause() invoked
- 2022-12-08 13:43:56.593 12546-12546/com.example.lifecycle D/lifecycle: onStop() invoked
- 2022-12-08 13:43:56.948 12546-12546/com.example.lifecycle D/lifecycle: onRestart() invoked
- 2022-12-08 13:43:56.950 12546-12546/com.example.lifecycle D/lifecycle: onStart() invoked
- 2022-12-08 13:43:56.952 12546-12546/com.example.lifecycle D/lifecycle: onResume() invoked
- 2022-12-08 13:44:02.815 12546-12546/com.example.lifecycle D/lifecycle: onPause() invoked
- 2022-12-08 13:44:03.570 12546-12546/com.example.lifecycle D/lifecycle: onStop() invoked
- 2022-12-08 13:44:03.579 12546-12546/com.example.lifecycle D/lifecycle: onDestroy() invoked

The bottom bar of the IDE shows the "Launch succeeded (20 minutes ago)" message and the taskbar with icons for Word Files, Practical No 2.docx..., and Lifecycle - MainAct...