

1. Write a program to create a HelloWorld Activity using all lifecycles methods to display messages using Log.d.
Activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        android:gravity="center"
        android:layout_marginTop="300dp"
        android:layout_marginLeft="150dp"
    />
</LinearLayout>
```

MainActivity.java

```
package com.example.activity;
import androidx.appcompat.app.AppCompatActivity;
import android.util.Log;
import android.os.Bundle;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Toast.makeText(MainActivity.this,"create",Toast.LENGTH_SHORT).show();
        Log.d("Create","onCreate invoked");
    }
    protected void onStart() {
        super.onStart();
        Toast.makeText(MainActivity.this,"Start",Toast.LENGTH_SHORT).show();
        Log.d("Start","onStart invoked");
    }
    protected void onResume() {
        super.onResume();
        Toast.makeText(MainActivity.this,"Resume",Toast.LENGTH_SHORT).show();
        Log.d("Resume","onResume invoked");
    }
    protected void onPause() {
        super.onPause();
        Toast.makeText(MainActivity.this,"Pause",Toast.LENGTH_SHORT).show();
        Log.d("Pause","onPause invoked");
    }
    protected void onStop() {
```

```
super.onStop();
Toast.makeText(MainActivity.this,"Stop",Toast.LENGTH_SHORT).show();
Log.d("Stop","onStop invoked");
}
protected void onRestart() {
    super.onRestart();
    Toast.makeText(MainActivity.this,"Restart",Toast.LENGTH_SHORT).show();
    Log.d("Restart","onRestart invoked");
}
protected void onDestroy() {
    super.onDestroy();
    Toast.makeText(MainActivity.this,"Destroy",Toast.LENGTH_SHORT).show();
    Log.d("Destroy","onDestroy invoked");
}
}
```

OUTPUT:

```
I Davey! duration=45717ms; Flags=1, FrameTimelineVsyncId=4545, IntendedVsyn
D onPause invoked
D onStop invoked
D onRestart invoked
D onStart invoked
D onResume invoked
I Skipped 68 frames! The application may be doing too much work on its mai
```