

Q1. Implementation of Android Activity lifecycle

MainActivity.java

```
package com.example.androidlifecycle;

import android.os.Bundle;
import android.widget.Toast;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Toast.makeText(getApplicationContext(), " Inside OnCreate",
            Toast.LENGTH_LONG).show();
    }

    @Override
    protected void onStart() {
        super.onStart();
        Toast.makeText(getApplicationContext(), " Inside OnStart",
            Toast.LENGTH_LONG).show();
    }

    @Override
    protected void onPause(){
        super.onPause();
        Toast.makeText(getApplicationContext(), " Inside OnPause",
            Toast.LENGTH_LONG).show();
    }

    @Override
    protected void onResume(){
        super.onResume();
        Toast.makeText(getApplicationContext(), " Inside OnResume",
            Toast.LENGTH_LONG).show();
    }

    @Override
    protected void onStop(){
        super.onStop();
        Toast.makeText(getApplicationContext(), " Inside onStop",
            Toast.LENGTH_LONG).show();
    }
}
```

```

@Override
protected void onDestroy(){
    super.onDestroy();
    Toast.makeText(getApplicationContext(), " Inside onDestroy",
        Toast.LENGTH_LONG).show();
}

@Override
protected void onRestart(){
    super.onRestart();
    Toast.makeText(getApplicationContext(), " Inside onRestart",
        Toast.LENGTH_LONG).show();
}
}

```

activity main.xml

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    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:textSize="34sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

```

AndroidManifest.xml

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools" >

```

```
<application
  android:allowBackup="true"
  android:dataExtractionRules="@xml/data_extraction_rules"
  android:fullBackupContent="@xml/backup_rules"
  android:icon="@mipmap/ic_launcher"
  android:label="@string/app_name"
  android:roundIcon="@mipmap/ic_launcher_round"
  android:supportRtl="true"
  android:theme="@style/Theme.AndroidLifecycle"
  tools:targetApi="31" >
  <activity
    android:name=".MainActivity"
    android:exported="true" >
    <intent-filter>
      <action android:name="android.intent.action.MAIN" />
      <category android:name="android.intent.category.LAUNCHER" />
    </intent-filter>
  </activity>
</application>

</manifest>
```

Output:





