

## 8. Create an application to display various activity life cycle and fragment life cycle methods.

// Activity Life Cycle

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

public class MainActivity extends AppCompatActivity {

    private static final String TAG = "MyTag";
    @Override
    protected void onCreate(Bundle savedInstanceState)
    {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Log.i(TAG, "onCreate");
        Toast.makeText(MainActivity.this, "Hello", Toast.LENGTH_LONG).show();
    }
    @Override
    protected void onStart() {
        super.onStart();
        Log.i(TAG, "onStart");
    }

    protected void onResume() {
        super.onResume();
        Log.i(TAG, "onResume");
    }

    protected void onPause() {
        super.onPause();
        Log.i(TAG, "onPause");
    }

    protected void onStop() {
        super.onStop();
        Log.i(TAG, "onStop");
    }

    protected void onDestroy() {
        super.onDestroy();
        Log.i(TAG, "onDestroy");
    }

    protected void onRestart() {
        super.onRestart();
        Log.i(TAG, "onRestart");
    }

    protected void onSaveInstanceState(Bundle outState) {
        super.onSaveInstanceState(outState);
        Log.i(TAG, "onSaveInstanceState");
    }

    protected void onRestoreInstanceState(Bundle savedInstanceState) {
        super.onRestoreInstanceState(savedInstanceState);
    }
}
```

```
        Log.i(TAG, "onRestoreInstanceState");
    }
```

## // Fragment Life Cycle

```
import android.annotation.TargetApi;
import android.app.Activity;
import android.app.Fragment;
import android.os.Build;
import android.os.Bundle;
import android.util.Log;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;

@TargetApi(Build.VERSION_CODES.KITKAT)
public class TestFragment extends Fragment {

    private void printLog(String s) {
        // display a message in Log File
        Log.d("LifeCycle:", s);
    }

    @Override
    public void onActivityCreated(Bundle savedInstanceState) {
        super.onActivityCreated(savedInstanceState);
        printLog("onActivityCreated Called");
    }

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
        Bundle savedInstanceState) {

        View v = inflater.inflate(R.layout.fragment_test, container,
false);
        printLog("onCreateView Called");

        return v;
    }

    @Override
    public void onViewCreated(View view, Bundle savedInstanceState) {
        super.onViewCreated(view, savedInstanceState);
        printLog("onViewCreated Called");
    }

    @Override
    public void onAttach(Activity activity) {
        super.onAttach(activity);
        printLog("onAttach Called");
    }

    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        printLog("onCreate Called");
    }

    @Override
```

```
public void onDestroy() {
    super.onDestroy();
    printLog("onDestroy Called");
}

@Override
public void onDestroyView() {
    super.onDestroyView();
    printLog("onDestroyView Called");
}

@Override
public void onDetach() {
    super.onDetach();
    printLog("onDetach Called");
}

@Override
public void onPause() {
    super.onPause();
    printLog("onPause Called");
}

@Override
public void onResume() {
    super.onResume();
    printLog("onResume Called");
}

@Override
public void onStart() {
    super.onStart();
    printLog("onStart Called");
}

@Override
public void onStop() {
    super.onStop();
    printLog("onStop Called");
}
}
```