Birla Institute of Technology, Mesra, Patna Campus



MI-Assignment

Name-Shubham Sourabh
Roll-Btech/15044/18
Sec-CSE 6th

#Assignment-6

Problem Statement:

Develop an application that implements Multi-threading

Code:

MainActivity.java

```
import androidx.appcompat.app.AppCompatActivity;
import android.content.pm.ActivityInfo;
import android.os.Bundle;
import android.view.View;
import android.view.WindowManager;
import android.widget.Button;
import android.widget.ImageView;

public class MainActivity extends AppCompatActivity {
    ImageView iv_background;
    Button btn_1,btn_2;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);

getWindow().setFlags(WindowManager.LayoutParams.FLAG_FULLSCREEN, WindowManager.LayoutParams.FLAG_FULLSCREEN);
```

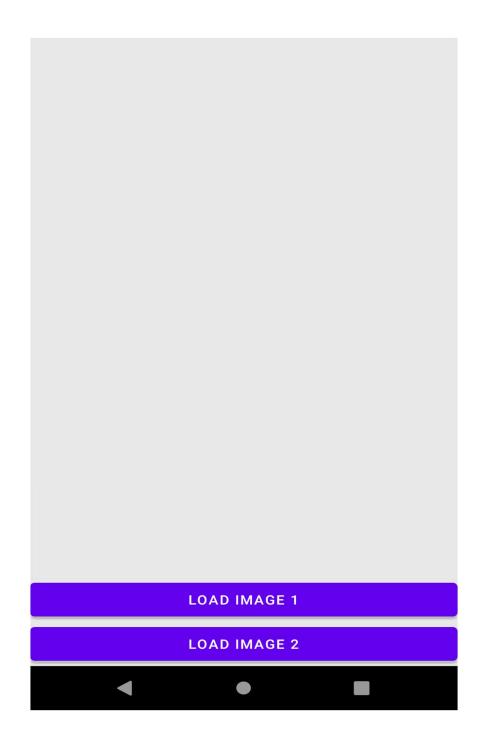
```
setRequestedOrientation(ActivityInfo.SCREEN ORIENTATION PORTRAI
T);
    setContentView(R.layout.activity main);
    iv_background = findViewById(R.id.iv_background);
    btn 1 = findViewById(R.id.btn 1);
    btn 2 = findViewById(R.id.btn 2);
    btn 1.setOnClickListener(new View.OnClickListener()
       @Override
       public void onClick(View v)
         new Thread(new Runnable()
         {
            @Override
            public void run()
              iv background.post(new Runnable()
                @Override
                public void run()
iv background.setImageResource(R.drawable.image1);
              });
         }).start();
    });
    btn_2.setOnClickListener(new View.OnClickListener()
```

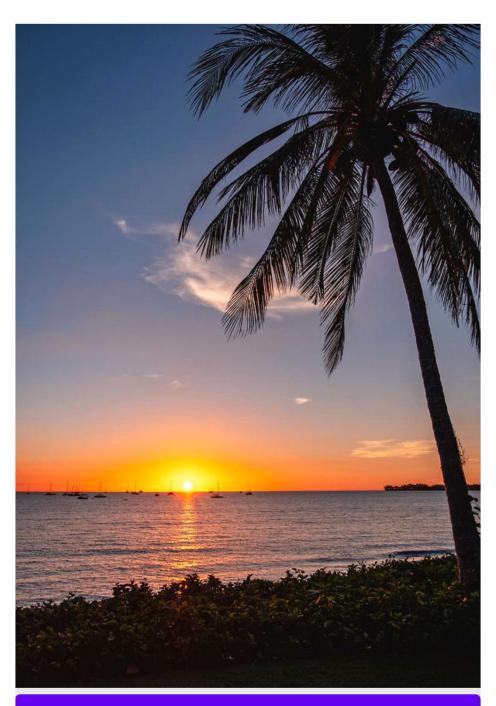
```
@Override
       public void onClick(View v)
         new Thread(new Runnable()
         {
            @Override
            public void run()
              iv_background.post(new Runnable()
                 @Override
                 public void run()
iv_background.setImageResource(R.drawable.image2);
                 }
              });
         }).start();
    });
}
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">
```

```
<lmageView</pre>
  android:id="@+id/iv background"
  android:layout width="0dp"
  android:layout height="0dp"
  android:scaleType="centerCrop"
  android:layout gravity="center"
  app:layout constraintBottom toTopOf="@+id/btn 1"
  app:layout constraintEnd toEndOf="parent"
  app:layout constraintStart toStartOf="parent"
  app:layout constraintTop toTopOf="parent" />
<Button
  android:id="@+id/btn 1"
  android:layout width="0dp"
  android:layout height="wrap content"
  android:layout gravity="center"
  android:text="Load Image 1"
  app:layout constraintBottom toTopOf="@+id/btn 2"
  app:layout constraintEnd toEndOf="parent"
  app:layout constraintStart toStartOf="parent" />
<Button
  android:id="@+id/btn 2"
  android:layout width="0dp"
  android:layout height="wrap content"
  android:layout gravity="center"
  android:text="Load image 2"
  app:layout constraintBottom toBottomOf="parent"
  app:layout constraintEnd toEndOf="parent"
  app:layout constraintStart toStartOf="parent" />
```

</androidx.constraintlayout.widget.ConstraintLayout>

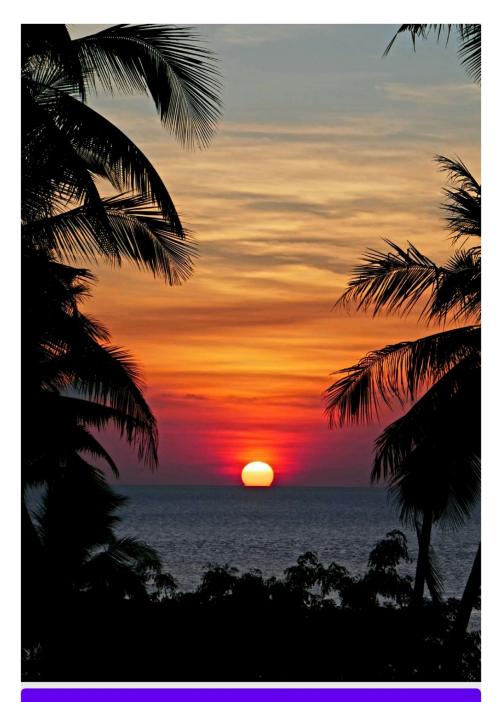
Output:





LOAD IMAGE 1

LOAD IMAGE 2



LOAD IMAGE 1

LOAD IMAGE 2