

Ex.No :06

Date :

**MULTITHREADING****OBJECTIVE**

To develop an Android Application that implements Multithreading.

**PROCEDURE**

Step 1: Create an android project using android studio.

Step 2: Design

Open the actual Project folder (app) in Android Studio IDE.

Click res directory -> layout -> activity\_main.xml -> Design.

Insert the GUI components to Design view in activity\_main.xml.

Enter the id for each component.

Step 3: Open your Android studio project folder (e.g. Project name: Multithreading)

-> Click app -> src -> main -> res -> drawable -> add \*.png file.

Step 4: Open Java -> MainActivity.java and add the code.

Step 5: Run the project and the output will be displayed in Emulator.

**PROGRAM:**

activity\_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical" >
    <ImageView
        android:id="@+id/imageView"
        android:layout_width="250dp"
        android:layout_height="250dp"
        android:layout_margin="50dp"
        android:layout_gravity="center" />
    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_margin="10dp"
        android:layout_gravity="center"
        android:text="Load Image 1" />
    <Button
        android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
```

```

        android:layout_margin="10dp"
        android:layout_gravity="center"
        android:text="Load image 2" />
</LinearLayout>

```

MainActivity.java

```

package com.example.exno6;

import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.ImageView;

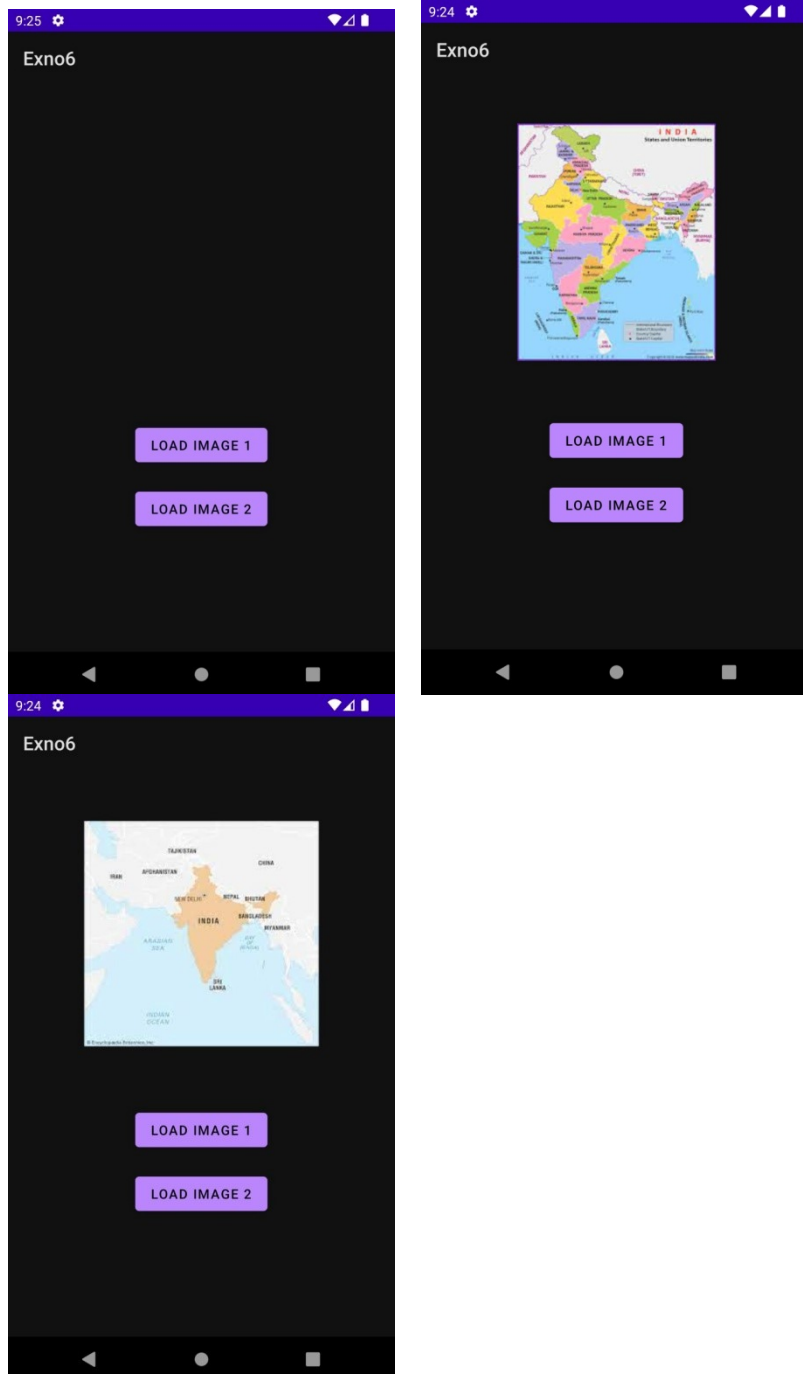
public class MainActivity extends AppCompatActivity {

    ImageView img;
    Button bt1, bt2;
    @Override
    protected void onCreate(Bundle savedInstanceState)
    {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        bt1 = (Button)findViewById(R.id.button);
        bt2= (Button) findViewById(R.id.button2);
        img = (ImageView)findViewById(R.id.imageView);
        bt1.setOnClickListener(new View.OnClickListener()
        {
            @Override
            public void onClick(View v)
            {
                new Thread(new Runnable()
                {
                    @Override
                    public void run()
                    {
                        img.post(new Runnable()
                        {
                            @Override
                            public void run()
                            {
                                img.setImageResource(R.drawable.img);
                            }
                        });
                    }
                }).start();
            }
        });
        bt2.setOnClickListener(new View.OnClickListener()

```

```
{
    @Override
    public void onClick(View v)
    {
        new Thread(new Runnable()
        {
            @Override
            public void run(){
                img.post(new Runnable()
                {
                    @Override
                    public void run()
                    {
                        img.setImageResource(R.drawable.img_1); }
                    });
            }
        }).start(); } });
}
```

## OUTPUT:



## CONCLUSION:

Thus a android application were created and tested successfully.