**Assignment-12**

**Aim:Create an Android application to implement the Canvas and Paint classes to design one green circle, one red rectangle, and one diagonal text.**

**Code:**

**.xml file code:**

<?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:id="@+id/main"

android:layout\_height="match\_parent"

android:gravity="center"

android:orientation="vertical"

tools:context=".paint" android:layout\_width="match\_parent">

</LinearLayout>

**.java file code:**

package com.example.myapplication;

import android.content.Context;

import android.graphics.Canvas;

import android.graphics.Color;

import android.graphics.Paint;

import android.os.Bundle;

import android.view.Menu;

import android.view.View;

import android.widget.LinearLayout;

import androidx.activity.EdgeToEdge;

import androidx.appcompat.app.AppCompatActivity;

public class paint extends AppCompatActivity {

DemoView demoview;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

EdgeToEdge.enable(this);

setContentView(R.layout.activity\_paint);

// Find layout and add custom view to it

LinearLayout layout = findViewById(R.id.main);

demoview = new DemoView(this);

layout.addView(demoview);

}

private class DemoView extends View {

public DemoView(Context context) {

super(context);

}

@Override

protected void onDraw(Canvas canvas) {

super.onDraw(canvas);

Paint paint = new Paint();

paint.setStyle(Paint.Style.FILL);

// Make the canvas white

paint.setColor(Color.WHITE);

canvas.drawPaint(paint);

// Draw blue circle without anti-alias

paint.setAntiAlias(false);

paint.setColor(Color.BLUE);

canvas.drawCircle(200, 200, 100, paint);

// Draw green circle with anti-alias

paint.setAntiAlias(true);

paint.setColor(Color.GREEN);

canvas.drawCircle(500, 200, 100, paint);

// Draw red rectangle

paint.setAntiAlias(false);

paint.setColor(Color.RED);

canvas.drawRect(200, 400, 500, 550, paint);

// Draw rotated text

canvas.save(); // Important: Save current state

canvas.rotate(-45, 400, 700); // Rotate around point (400,700)

paint.setColor(Color.BLACK);

paint.setTextSize(60);

canvas.drawText("Graphics Rotation", 200, 700, paint);

canvas.restore(); // Undo rotate

}

}

@Override

public boolean onCreateOptionsMenu(Menu menu) {

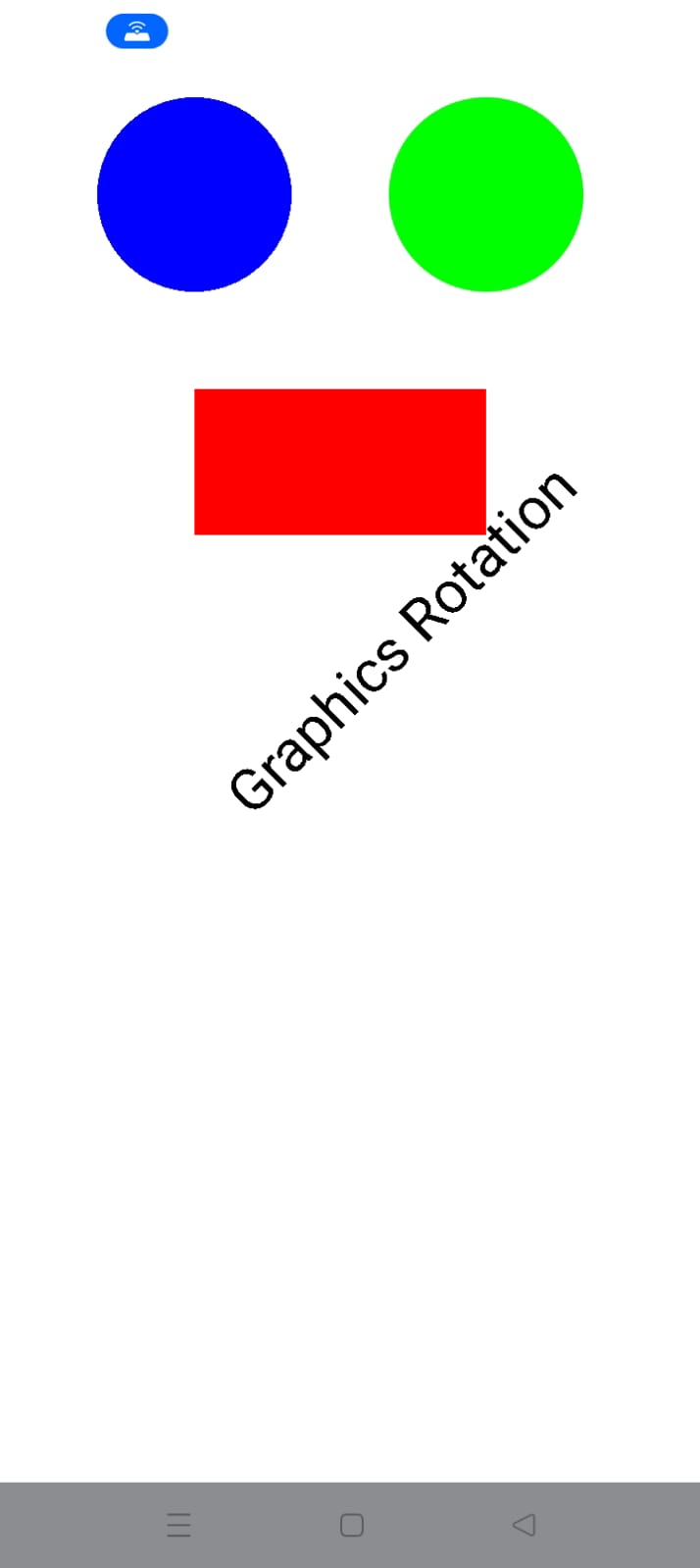
getMenuInflater().inflate(R.menu.menu, menu);

return true;

}

}

**OUTPUT:**

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