**Exp No.1**

**Rishab Mandal**

**Batch: C23**

**Code:**

activity\_main.xml

<?xml version="1.0" encoding="utf-8"?>  
<androidx.coordinatorlayout.widget.CoordinatorLayout  
 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"  
 android:fitsSystemWindows="true"  
 tools:context=".MainActivity">

<TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="C23\nRishab Mandal\nRoll no: 2103110"  
 android:textSize="20sp"  
 android:textColor="@android:color/black"  
 android:layout\_centerHorizontal="true"  
 android:layout\_margin="50dp"/>

<!-- Include your CustomView -->  
 <com.example.exp1app.CustomView  
 android:id="@+id/customView"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent" />  
  
</androidx.coordinatorlayout.widget.CoordinatorLayout>

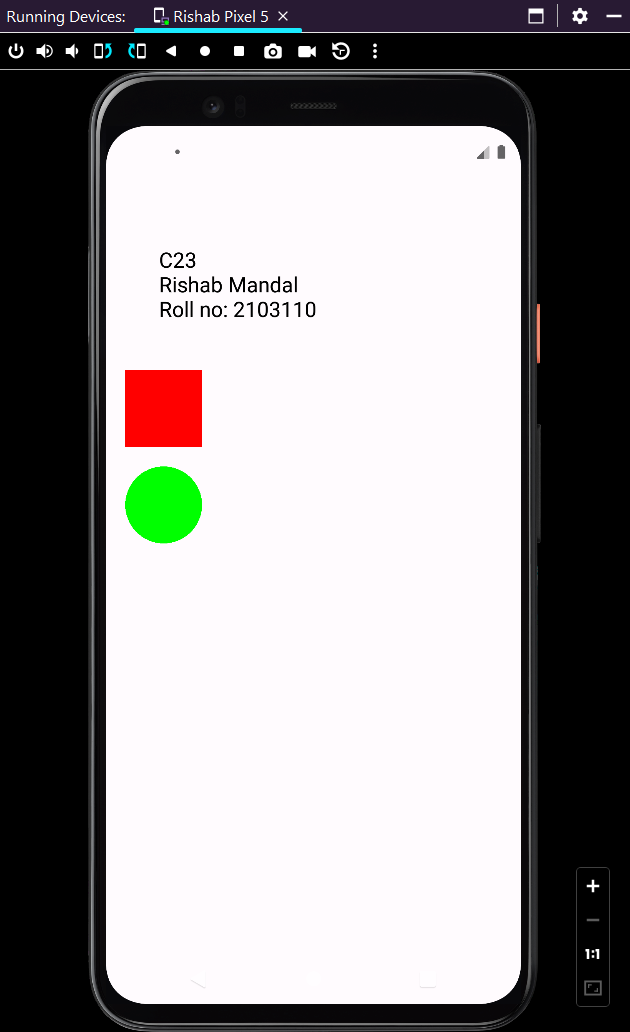
MainActivity.java

package com.example.exp1app**;**import android.os.Bundle**;**import com.google.android.material.snackbar.Snackbar**;**import androidx.appcompat.app.AppCompatActivity**;**import android.view.View**;**import androidx.core.view.WindowCompat**;**import androidx.navigation.NavController**;**import androidx.navigation.Navigation**;**import androidx.navigation.ui.AppBarConfiguration**;**import androidx.navigation.ui.NavigationUI**;**import com.example.exp1app.databinding.ActivityMainBinding**;**import android.view.Menu**;**import android.view.MenuItem**;**public class MainActivity extends AppCompatActivity {  
  
 private AppBarConfiguration appBarConfiguration**;** private ActivityMainBinding binding**;** @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState)**;** setContentView(R.layout.*activity\_main*)**;** CustomView customView = findViewById(R.id.*customView*)**;** }  
}

CustomView.java

package com.example.exp1app**;**// CustomView.java  
import android.content.Context**;**import android.graphics.Canvas**;**import android.graphics.Color**;**import android.graphics.Paint**;**import android.util.AttributeSet**;**import android.view.View**;**public class CustomView extends View {  
  
 private Paint paint**;** public CustomView(Context context) {  
 super(context)**;** init()**;** }  
  
 public CustomView(Context context**,** AttributeSet attrs) {  
 super(context**,** attrs)**;** init()**;** }  
  
 private void init() {  
 paint = new Paint()**;** paint.setColor(Color.*RED*)**;** paint.setStyle(Paint.Style.*FILL*)**;** }  
  
 @Override  
 protected void onDraw(Canvas canvas) {  
 super.onDraw(canvas)**;** // Draw a rectangle  
 int rectLeft = **50;** int rectTop = **50;** int rectRight = **250;** int rectBottom = **250;** canvas.drawRect(rectLeft**,** rectTop**,** rectRight**,** rectBottom**,** paint)**;** // Draw a circle below the rectangle  
 paint.setColor(Color.*GREEN*)**;** int circleRadius = **100;** int circleCenterX = (rectLeft + rectRight) / **2;** int circleCenterY = rectBottom + circleRadius + **50;** canvas.drawCircle(circleCenterX**,** circleCenterY**,** circleRadius**,** paint)**;** }  
}

**Output:**

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