**Exp No.2**

**Rishab Mandal**

**Batch: C23**

**Code:**

activity\_main.xml

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 android:padding="16dp"  
 tools:context=".MainActivity">

<TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerHorizontal="true"  
 android:text="C23\nRishab Mandal\nRoll no: 2103110"  
 android:textColor="@android:color/black"  
 android:textSize="20sp"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent" />

<TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Name:"/>  
  
 <EditText  
 android:id="@+id/editTextName"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter your name"/>  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Email:"/>  
  
 <EditText  
 android:id="@+id/editTextEmail"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:inputType="textEmailAddress"  
 android:hint="Enter your email"/>  
  
 <RadioGroup  
 android:id="@+id/radioGroupGender"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal">  
  
 <RadioButton  
 android:id="@+id/radioButtonMale"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Male"/>  
  
 <RadioButton  
 android:id="@+id/radioButtonFemale"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Female"/>  
  
 </RadioGroup>  
  
 <CheckBox  
 android:id="@+id/checkBoxAgree"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="I agree to the terms and conditions"/>  
  
 <Button  
 android:id="@+id/buttonSubmit"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Submit"/>  
  
</LinearLayout>

MainActivity.java

package com.example.a3dfigures**;**//package com.example.exp2new38;  
  
import androidx.appcompat.app.AppCompatActivity**;**import android.app.Activity**;**import android.graphics.Bitmap**;**import android.graphics.Canvas**;**import android.graphics.Color**;**import android.graphics.Paint**;**import android.graphics.RectF**;**import android.graphics.drawable.BitmapDrawable**;**import android.widget.ImageView**;**import android.os.Bundle**;**public class MainActivity extends AppCompatActivity {  
 @Override  
 public void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState)**;** setContentView(R.layout.*activity\_main*)**;** //Creating a Bitmap  
 Bitmap bg = Bitmap.*createBitmap*(**720, 1280,** Bitmap.Config.*RGB\_565*)**;** //Setting the Bitmap as background for the ImageView  
 ImageView i = (ImageView) findViewById(R.id.*imageView*)**;** i.setBackgroundDrawable(new BitmapDrawable(bg))**;** //Creating the Canvas Object  
 Canvas canvas = new Canvas(bg)**;** //Creating the Paint Object and set its color & TextSize  
 Paint paintBlack = new Paint()**;** paintBlack.setColor(Color.*YELLOW*)**;** paintBlack.setTextSize(**80**)**;** Paint paintBlue = new Paint()**;** paintBlue.setColor(Color.*WHITE*)**;** paintBlue.setTextSize(**100**)**;** //To draw a Cube  
 canvas.drawText("Cube"**, 220, 150,** paintBlack)**;**// canvas.drawRect(400, 200, 500, 300, paint);  
// canvas.drawRect(500, 200, 600, 300, paint);  
 canvas.drawLine(**200, 200, 500, 200,** paintBlue)**;** canvas.drawLine(**200, 500, 500, 500,** paintBlue)**;** canvas.drawLine(**500, 200, 500, 500,** paintBlue)**;** canvas.drawLine(**200, 200, 200, 500,** paintBlue)**;** canvas.drawLine(**300, 300, 600, 300,** paintBlue)**;** canvas.drawLine(**300, 600, 600, 600,** paintBlue)**;** canvas.drawLine(**600, 300, 600, 600,** paintBlue)**;** canvas.drawLine(**300, 300, 300, 600,** paintBlue)**;** canvas.drawLine(**200, 200, 300, 300,** paintBlue)**;** canvas.drawLine(**500, 200, 600, 300,** paintBlue)**;** canvas.drawLine(**200, 500, 300, 600,** paintBlue)**;** canvas.drawLine(**500, 500, 600, 600,** paintBlue)**;** canvas.drawText("Cone"**, 100, 800,** paintBlack)**;** canvas.drawLine(**200, 900, 100, 1100,** paintBlue)**;** canvas.drawLine(**200, 900, 300, 1100,** paintBlue)**;** //canvas.drawArc(180, 180, 180, 540, paintBlue);  
  
 RectF rectF = new RectF(**100, 1000, 300, 1200**)**;** canvas.drawArc(rectF**, 0, 180,** true**,** paintBlue)**;** canvas.drawText("Prism"**, 400, 800,** paintBlack)**;** float[] points1 = {**450, 950, 400, 1150, 450, 950, 500, 1150, 400, 1150, 500, 1150**}**;** canvas.drawLines(points1**,** paintBlue)**;** float[] points2 = {**650, 900, 600, 1100, 650, 900, 700, 1100, 600, 1100, 700, 1100**}**;** canvas.drawLines(points2**,** paintBlue)**;** float[] points3 = {**450, 950, 650, 900, 500, 1150, 700, 1100, 400, 1150, 600, 1100,**}**;** canvas.drawLines(points3**,** paintBlue)**;** }  
}

**Output:**

