BUTTON CLICK:-

Activity.xml:-

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:orientation="vertical"
    tools:context=".MainActivity">
    <com.example.smile.FaceView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content" />
    <Button
        android:id="@+id/button"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="---> Sad Face" />
</RelativeLayout>
```

Activity_sec.xml:-

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <com.example.smile.FaceView2
        android:layout_width="wrap_content"
        android:layout_height="wrap_content" />
    <Button
        android:id="@+id/button1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="---> Happy Face" />
</RelativeLayout>
```

Mainactivity.java:-

```java
package com.example.smile;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
public class MainActivity extends AppCompatActivity {
    Button button;
    @Override
    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        button = (Button) findViewById(R.id.button);
        button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                openNewActivity();
            }
        });
```

```
    }
    public void openNewActivity(){
        Intent intent = new Intent(this,MainActivity2.class);
        startActivity(intent);
    }
}
```

mainactivity2:-

```
package com.example.smile;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import com.example.smile.databinding.ActivityMain2Binding;
import androidx.appcompat.app.AppCompatActivity;
import androidx.navigation.ui.AppBarConfiguration;
public class MainActivity2 extends AppCompatActivity {
    Button button1;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_sec);
        button1 = (Button) findViewById(R.id.button1);
        button1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                openNewActivity();
            }
        });
    }
    public void openNewActivity(){
        Intent intent1 = new Intent(this,MainActivity.class);
        startActivity(intent1);
    }
}
```

FaceView.java:-

```
package com.example.smile;
import android.content.Context;
import android.graphics.Canvas;
import android.graphics.Color;
import android.graphics.Paint;
import android.graphics.RectF;
import android.util.AttributeSet;
import android.view.View;
public class FaceView extends View {
    private Paint paint,paint1,paint2;
    private RectF RectF;
    public FaceView(Context context,AttributeSet attrs) {
        super(context);
// create the Paint and set its color
        paint = new Paint();
        paint1 = new Paint();
        paint2 = new Paint();
        paint.setColor(Color.RED);
        paint1.setColor(Color.YELLOW);
        paint2.setColor(Color.BLACK);
```

```
        }
    @Override
    protected void onDraw(Canvas canvas) {
        canvas.drawColor(Color.WHITE);
        canvas.drawCircle(500, 600, 220, paint);
        canvas.drawCircle(400, 570, 30, paint2);
        canvas.drawCircle(600, 570, 30, paint2);
        RectF oval = new RectF(400, 520 + 520 / 8, 600, (float) (520 + 520
                / 2.5));
        canvas.drawArc(oval, 10, 160, false, paint1);
    }
}
```

FaceView2:-

```
package com.example.smile;
import android.content.Context;
import android.graphics.Canvas;
import android.graphics.Color;
import android.graphics.Paint;
import android.graphics.RectF;
import android.util.AttributeSet;
import android.view.View;
public class FaceView2 extends View {
    private Paint paint,paint1,paint2;
    private RectF RectF;
    public FaceView2(Context context,AttributeSet attrs) {
        super(context);
// create the Paint and set its color
        paint = new Paint();
        paint1 = new Paint();
        paint2 = new Paint();
        paint.setColor(Color.RED);
        paint1.setColor(Color.YELLOW);
        paint2.setColor(Color.BLACK);
    }
    @Override
    protected void onDraw(Canvas canvas) {
        canvas.drawColor(Color.WHITE);
        canvas.drawCircle(500, 600, 220, paint);
        canvas.drawCircle(400, 570, 30, paint2);
        canvas.drawCircle(600, 570, 30, paint2);
        RectF oval = new RectF(400, 520 + 520 / 7, 600, (float) (520 + 520
                / 2.5));
        canvas.drawArc(oval, 10, -200, false, paint1);
    }
}
```

output:-