

Program 4

Develop a canvas to draw different shapes and to fill the shapes with different colours.

CustomView.java

```
package com.example.shape;
import android.content.Context;
import android.graphics.Canvas;
import android.graphics.Color;
import android.graphics.Paint;
import android.graphics.Rect;
import android.view.View;
public class CustomView extends View {

    private Rect rectangle;
    private Paint paint, p1;

    public CustomView(Context context) {
        super(context);
        int x = 200;
        int y = 50;
        int width = 800;
        int height = 300;

        // create a rectangle that we'll draw later
        rectangle =new

        Rect(x, y, width, height);

        // create the Paint and set its color
        paint =new

        Paint();
        paint.setColor(Color.GRAY);

        p1 =new

        Paint();
        p1.setColor(Color.RED);
    }

    protected void onDraw(Canvas canvas) {
        canvas.drawColor(Color.BLACK);
        canvas.drawRect(rectangle, paint);
    }
}
```

MAINACTIVITY.JAVA

```
package com.example.shape;

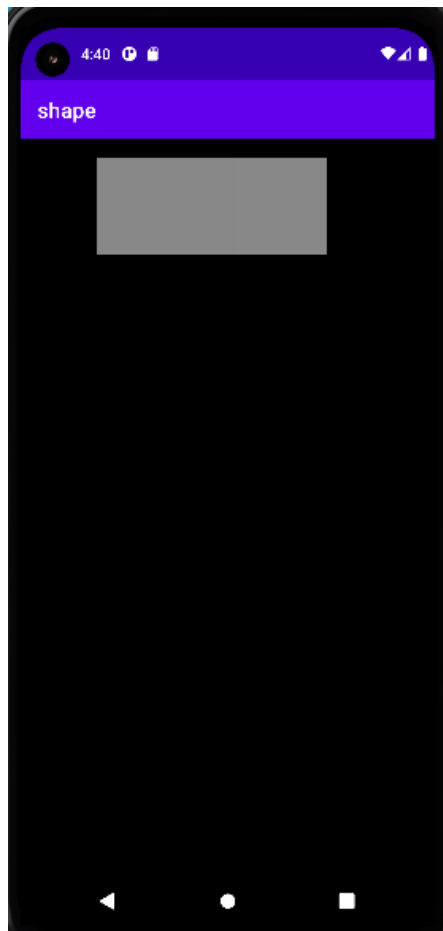
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;

//import android.support.v7.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(new com.example.shape.CustomView(this));
    }
}
```

OUTPUT



CIRCLE

CustomView.java

```
package com.example.smiley;

import android.content.Context;
import android.graphics.Canvas;
import android.graphics.Color;
import android.graphics.Paint;
import android.view.View;

public class CustomView extends View {

    private Paint paint, paint1,pl;

    public CustomView(Context context) {
        super(context);

        // create a rectangle that we'll draw later

        // create the Paint and set its color

        paint = new Paint();
        paint.setColor(Color.WHITE);
        paint1 = new Paint();
        paint1.setColor(android.R.color.black);
    }

    @Override
    protected void onDraw(Canvas canvas) {
        canvas.drawColor(Color.BLACK);
        canvas.drawCircle(500,500,400,paint);
        canvas.drawOval(450,450,150,250,paint1);
    }

}
```

MAIN_ACTIVITY.JAVA

```
package com.example.smiley;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(new com.example.smiley.CustomView(this));
    }

}
```

OUTPUT

