

EXPERIMENT - 1

CODE:

```
package com.example.myapplication;
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.drawable.BitmapDrawable;
import android.widget.ImageView;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        // Creating a Bitmap
        Bitmap bg = Bitmap.createBitmap(720, 1280, Bitmap.Config.ARGB_8888);

        // Setting the Bitmap as background for the ImageView
        ImageView i = findViewById(R.id.imageview);
        i.setImageBitmap(bg);

        //Creating the Canvas Object
        Canvas canvas = new Canvas(bg);

        //Creating the Paint Object and set its color & TextSize
        Paint paint = new Paint();
        paint.setColor(Color.BLUE);
        paint.setTextSize(50);

        Paint paint1 = new Paint();
        paint1.setColor(Color.RED);
```

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    paint1.setTextSize(50);

    Paint paint2 = new Paint();
    paint2.setColor(Color.GREEN);
    paint2.setTextSize(50);

    Paint paint3 = new Paint();
    paint3.setColor(Color.BLACK);
    paint3.setTextSize(50);

    Paint paint4 = new Paint();
    paint4.setColor(Color.BLACK);
    paint4.setTextSize(30);
    canvas.drawText("Yash Sabhandasani - 2103151",100, 60, paint4);

    //To draw a Rectangle
    canvas.drawText("Rectangle", 420, 150, paint);
    canvas.drawRect(400, 200, 650, 700, paint);

    //To draw a Circle
    canvas.drawText("Circle", 120, 150, paint1);
    canvas.drawCircle(200, 350, 150, paint1);

    //To draw a Square
    canvas.drawText("Square", 120, 800, paint2);
    canvas.drawRect(50, 850, 350, 1150, paint2);

    //To draw a Line
    canvas.drawText("Line", 480, 800, paint3);
    canvas.drawLine(520, 850, 520, 1150, paint3);
}
}

```

XML:

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent">
<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:layout_width="match_parent"
android:layout_height="match_parent"
tools:context="MainActivity">

<ImageView
    android:id="@+id/imageview"
    android:layout_width="match_parent"
    android:layout_height="match_parent" />

</LinearLayout>
</androidx.constraintlayout.widget.ConstraintLayout>
```

OUTPUT:

