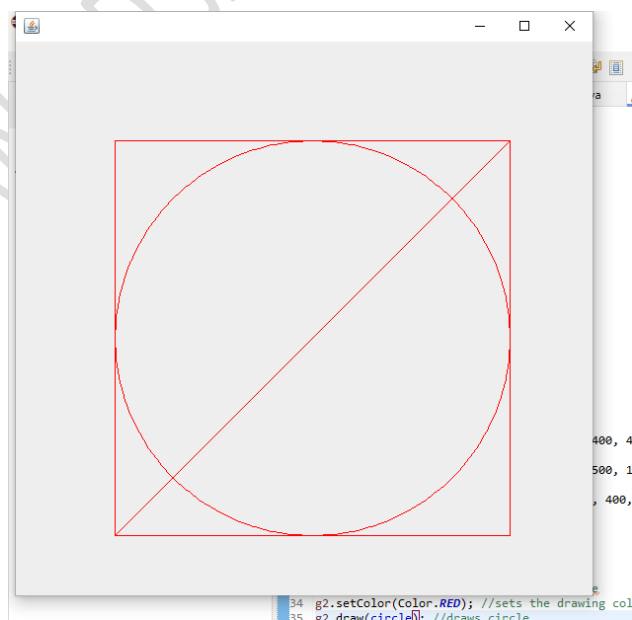


## GRAPHICS IN JAVA VIA EXAMPLE

The main class (**DrawingInWindow**) inherits the **JFrame**, so the win object, which is actually the main window of the application, is the **DrawingInWindow** class.

| Class               | Metods  | Description  |
|---------------------|---|--|
| java.awt.Graphics   | drawRect(int x,int y, int w, int h)                         | Draws a rectangle whose upper left corner is in coordinates (x,y), w- width h- height  |
| java.awt.Graphics   | drawLine(int x1,int y1, int x2, int y2)                     | Draws a line from the point (x1,y1), to the point (x2,y2)  |
| java.awt.Graphics   | drawOval(int x,int y, int w, int h)                         | Draws an ellipse whose upper left corner is the rectangle described around the ellipse in coordinates (x,y), w- width h-height   |
| java.awt.Graphics   | drawRoundRect(int x,int y, int w, int h,int arcW, int arcH) | Draws a rectangle with rounded edges whose upper left corner is in coordinates (x,y), w- width h-height arcW-horizontal radius diameter all 4 angles arcH- vertical radius diameter all 4 angles |
| java.awt.Graphics   | drawArc(int x,int y, int w, int h, int pocU, int krajU)     | Draws a circular arc whose upper left corner is at coordinates(x,y), w- width h- height pocU-the initial angle of the arch krajU-the far corner of the arch                                      |
| java.awt.Graphics   | drawString(String str, int x,int y)                         | Draws a String str inside a rectangle whose upper left corner is in coordinates (x,y),   |
| java.awt.Graphics2D | draw(Shape shape)   | Draws an object whose upper left corner is a rectangle described around an ellipse in coordinates (x,y), w- širina h-visina  |
| java.awt.Graphics2D | fill(Shape shape)   | Colors an object whose upper left corner is a rectangle described around an ellipse in coordinates(x,y), w- širina h-visina  |
| java.awt.Graphics   | fillRect(int x,int y, int w, int h)                         | Colors a rectangle whose upper left corner is in coordinates (x,y), w- širina h-visina   |
| java.awt.Graphics   | fillOval(int x,int y, int w, int h)                         | Paints an ellipse whose upper left corner is a rectangle described around an ellipse in coordinates (x,y), w- širina h-visina  |

1



**Packages that needs to be imported**

```
import java.awt.*;
import javax.swing.*;

import java.awt.Color;

import java.awt.Graphics;

import java.awt.Graphics2D;

import java.awt.geom.Ellipse2D; //circle, oval
import java.awt.geom.Line2D;    //line
import java.awt.geom.Rectangle2D; //

import javax.swing.JPanel;

//make a class test under package test->
//it is main class i.e. TO BE RUN
```

```
public class Test extends JFrame
{
    Test()
    {

        setSize(600, 600);

        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

        Drawing1 draw1=new Drawing1();

        setContentPane(draw1);

        setVisible(true);
```

```
}  
  
public static void main(String[] args)  
{  
    Test t=new Test();  
}  
}  
  
//make a class Drawing1 under package test->
```

```
package test;  
  
import java.awt.Color;  
  
import java.awt.Graphics;  
  
import java.awt.Graphics2D;  
  
import java.awt.geom.Ellipse2D;  
  
import java.awt.geom.Line2D;  
  
import java.awt.geom.Rectangle2D;
```

```
import javax.swing.JPanel;
```

```
public class Drawing1 extends JPanel
```

```
{
```

```
/*
```

## **\* Shapes**

**\*/**

**Ellipse2D circle;**

**Rectangle2D square;**

**Line2D diagonals;**

**public Drawing1() {**

**//creating circle**

**circle = new Ellipse2D.Double(100, 100, 400, 400);**

**//creating diagonals**

**diagonals = new Line2D.Double(100, 500, 500, 100);**

**//creating squares**

**square = new Rectangle2D.Double(100, 100, 400, 400);**

**}**

**@Override**

**public void paint(Graphics g)**

**{**

**super.paint(g);**

**Graphics2D g2=(Graphics2D) g;//kastovanje**

**g2.setColor(Color.RED); //sets the drawing color to blue**

**g2.draw(circle); //draws circle**

**g2.draw(diagonals); //draws a diagonal**

**g2.draw(square); //draws a square**

**}**

**}**