

L. S.
College
MUZ.

JAVA APPLET PROGRAMMING LANGUAGE TUTORIAL

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Run Under

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Chapter-2

Applet Graphics in Java

GRAPHICS IN APPLLET :-



⦿ Graphics

The Graphics class is the abstract super class for all graphics contexts which allow an application to draw off-screen images.

A Graphics object encapsulates all state information required for the basic rendering operations that Java supports. State information includes the following properties.

- ⦿ The Component object on which to draw.
- ⦿ The current color.
- ⦿ The current font.

HOW TO USE GRAPHICS CLASS:-

Graphics class can be use by using two methods:

- ◉ Using class object
- ◉ Using class inheritance

//using object

```
Import java.applet.*;
Import java.awt.*;
Public class myapp extends Applet
{
    public void paint(Graphics g)
    {
        statement;
        statement;
    }
}
```

//using inheritance

```
Import java.applet.*;
Import java.awt.*;
Public class myapp extends Graphics
{
}
}
```

GRAPHICS CLASS METHODS :-

S.N.	Method & Description
01	setColor(Color c) Sets this graphics context's current color to the specified color.
02	setFont(Font font) Sets this graphics context's font to the specified font.
03	fillArc(int x, int y, int width, int height, int startAngle, int arcAngle) Fills a circular or elliptical arc covering the specified rectangle.
04	fillOval(int x, int y, int width, int height) Fills an oval bounded by the specified rectangle with the current color.
05	fillPolygon(int[] xPoints, int[] yPoints, int nPoints) Fills a closed polygon defined by arrays of x and y coordinates.
06	fillPolygon(Polygon p) Fills the polygon defined by the specified Polygon object with the graphics context's current color.
07	fillRect(int x, int y, int width, int height) Fills the specified rectangle.
08	fillRoundRect(int x, int y, int width, int height, int arcWidth, int arcHeight) Fills the specified rounded corner rectangle with the current color.

09	drawLine(int x1, int y1, int x2, int y2) Draws a line, using the current color, between the points (x1, y1) and (x2, y2) in this graphics context's coordinate system.
10	drawOval(int x, int y, int width, int height) Draws the outline of an oval.
11	drawPolygon(int[] xPoints, int[] yPoints, int nPoints) Draws a closed polygon defined by arrays of x and y coordinates.
12	drawPolygon(Polygon p) Draws the outline of a polygon defined by the specified Polygon object.
13	drawPolyline(int[] xPoints, int[] yPoints, int nPoints) Draws a sequence of connected lines defined by arrays of x and y coordinates.
14	drawRect(int x, int y, int width, int height) Draws the outline of the specified rectangle.
15	drawRoundRect(int x, int y, int width, int height, int arcWidth, int arcHeight) Draws an outlined round-cornered rectangle using this graphics context's current color.
16	drawString(AttributedCharacterIterator iterator, int x, int y) Renders the text of the specified iterator applying its attributes in accordance with the specification of the TextAttribute class.
17	drawString(String str, int x, int y) Draws the text given by the specified string, using this graphics context's current font and color.

SIMPLE EXAMPLE TO GRAPHICS:-

```
//java code myapp.java
```

```
Import java.applet.*;
```

```
Import java.awt.*;
```

```
Public class myapp applet extends Applet
```

```
{
```

```
    public void paint(Graphics g)
```

```
    {
```

```
        g.setColor(Color.GRAY);
```

```
        Font font = new Font("Serif", Font.PLAIN, 24);
```

```
        g.setFont(font);
```

```
        g.drawString("Welcome to LS", 50, 150);
```

```
    }
```

```
}
```

```
//HTML code myapp.html
```

```
<html>
```

```
    <head>
```

```
        <applet code="myapp.class" width="300" height="300">
```

```
    </applet>
```

```
    </head>
```

```
</html>
```

How to Run:

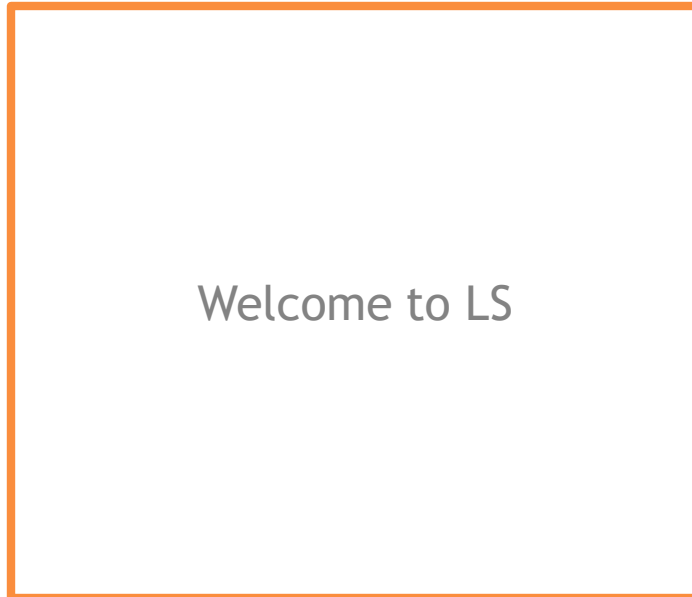
Compile the program using command prompt and type the following command.

- `D:\AWT>javac myapp.java`

If no error comes that means compilation is successful. Run the program using following command.

- `D:\AWT>appletviewer myapp.html`

Output:



THANK YOU