AWT CANVAS CLASS

http://www.tutorialspoint.com/awt/awt_canvas.htm

Introduction

Canvas control represents a rectangular area where application can draw something or can receive inputs created by user.

Class declaration

Following is the declaration for **java.awt.Canvas** class:

```
public class Canvas
   extends Component
      implements Accessible
```

Class constructors

S.N.	Constructor & Description
1	**Canvas** Constructs a new Canvas.
2	**Canvas** *GraphicsConfigurationconfig* Constructs a new Canvas given a GraphicsConfiguration object.

Class methods

S.N.	Method & Description
1	**void addNotify** br>Creates the peer of the canvas.
2	**void createBufferStrategy** *intnumBuffers* Creates a new strategy for multi-buffering on this component.
3	**void createBufferStrategy** *intnumBuffers, BufferCapabilitiescaps* Creates a new strategy for multi-buffering on this component with the required buffer capabilities.
4	**AccessibleContext getAccessibleContext** Gets the AccessibleContext associated with this Canvas.

5

BufferStrategy getBufferStrategy

Returns the BufferStrategy used by this component.

6

void paint*Graphicsg*

Paints this canvas.

7

void pdate*Graphicsg*

Updates this canvas.

Methods inherited

This class inherits methods from the following classes:

- java.awt.Component
- java.lang.Object

Canvas Example

Create the following java program using any editor of your choice in say **D:/ > AWT > com > tutorialspoint > gui >**

AwtControlDemo.java

```
package com.tutorialspoint.gui;

import java.awt.*;
import java.awt.event.*;

public class AwtControlDemo {

   private Frame mainFrame;
   private Label headerLabel;
   private Label statusLabel;
   private Panel controlPanel;

   public AwtControlDemo(){
      prepareGUI();
   }

   public static void main(String[] args){
      AwtControlDemo  awtControlDemo = new AwtControlDemo();
      awtControlDemo.showCanvasDemo();
   }

   private void prepareGUI(){
      mainFrame = new Frame("Java AWT Examples");
      mainFrame.setSize(400,400);
      mainFrame.setLayout(new GridLayout(3, 1));
      mainFrame.addWindowListener(new WindowAdapter() {
         public void windowClosing(WindowEvent windowEvent){
            System.exit(0);
         }
      });
      headerLabel = new Label();
      headerLabel.setAlignment(Label.CENTER);
      statusLabel = new Label();
      statusLabel.setAlignment(Label.CENTER);
      statusLabel.setSize(350,100);
      controlPanel = new Panel();
      controlPanel.setLayout(new FlowLayout());

      mainFrame.add(headerLabel);
      mainFrame.add(controlPanel);
      mainFrame.add(statusLabel);
      mainFrame.setVisible(true);
   }

   private void showCanvasDemo(){
      headerLabel.setText("Control in action: Canvas");

      controlPanel.add(new MyCanvas());
      mainFrame.setVisible(true);
   }

   class MyCanvas extends Canvas {

      public MyCanvas () {
         setBackground (Color.GRAY);
         setSize(300, 300);
      }

      public void paint (Graphics g) {
         Graphics2D g2;
         g2 = (Graphics2D) g;
         g2.drawString ("It is a custom canvas area", 70, 70);
      }
   }
}
```

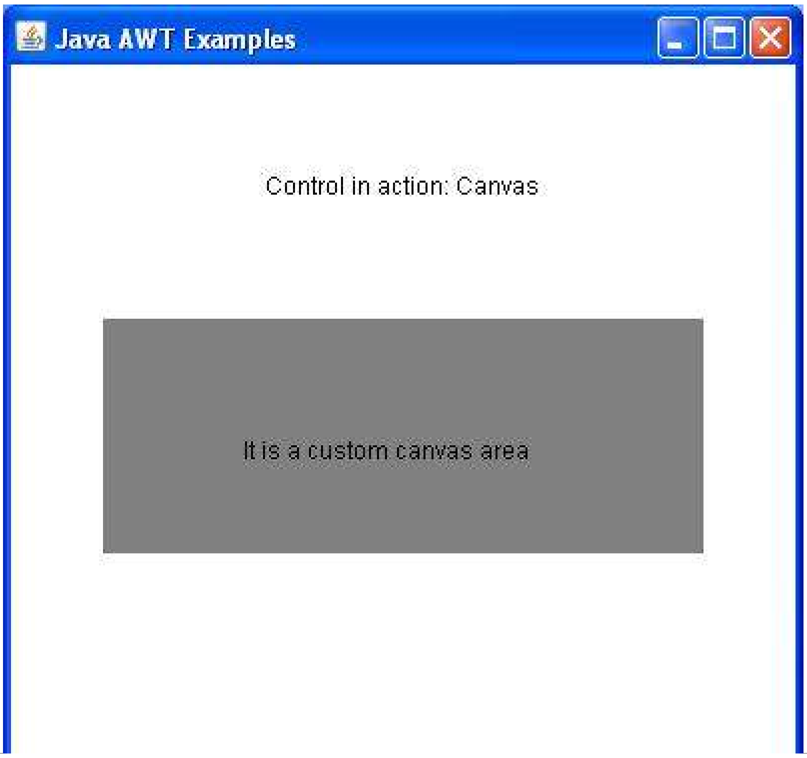
Compile the program using command prompt. Go to **D:/ > AWT** and type the following command.

```
D:\AWT>javac com\tutorialspoint\gui\AwtControlDemo.java
```

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

```
D:\AWT>java com.tutorialspoint.gui.AwtControlDemo
```

Verify the following output


Java AWT Examples
Control in action: Canvas
It is a custom canvas area