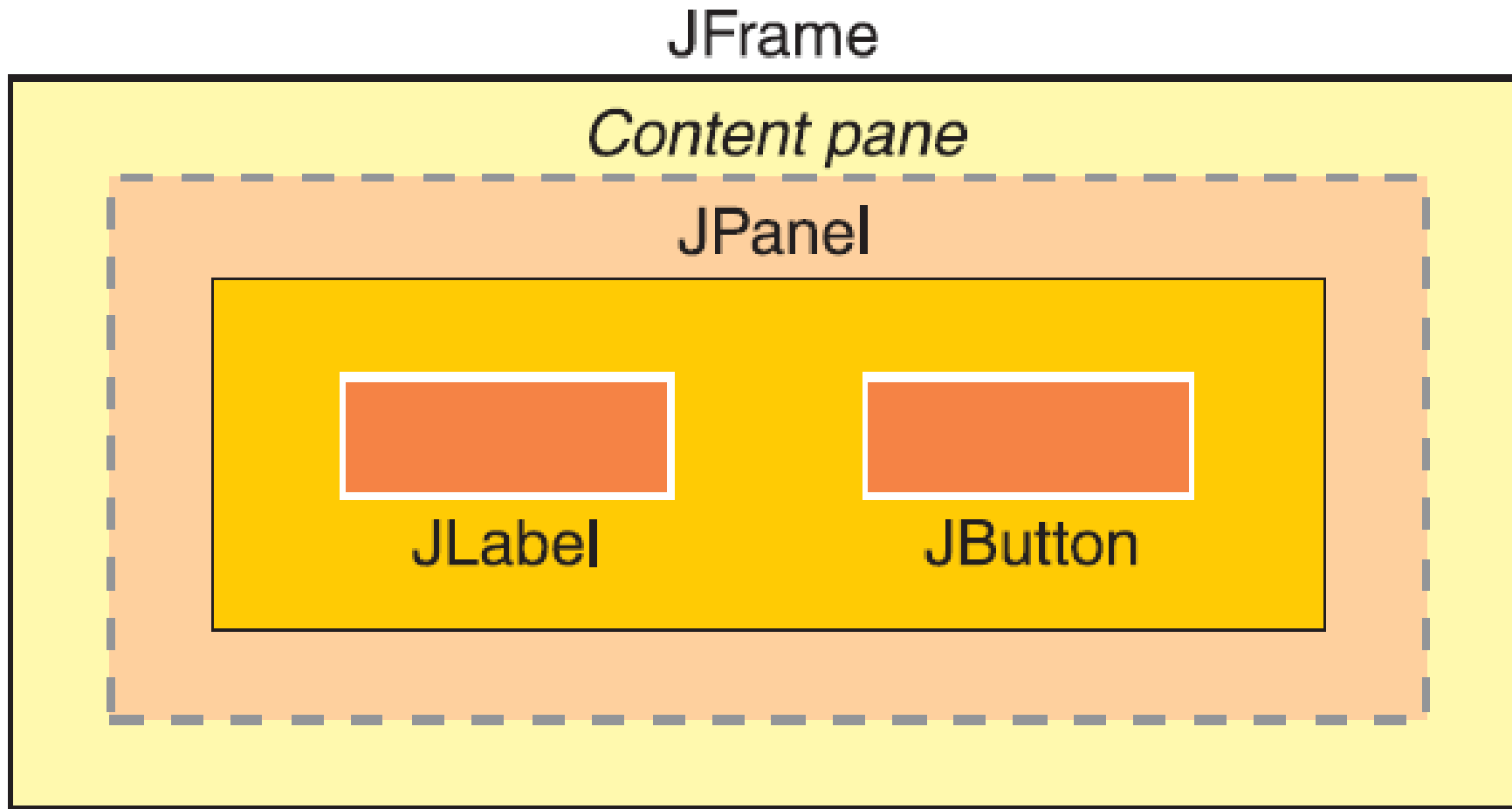


# APPLICAZIONI GRAFICHE in JAVA

**I panel in JAVA (JPanel)**

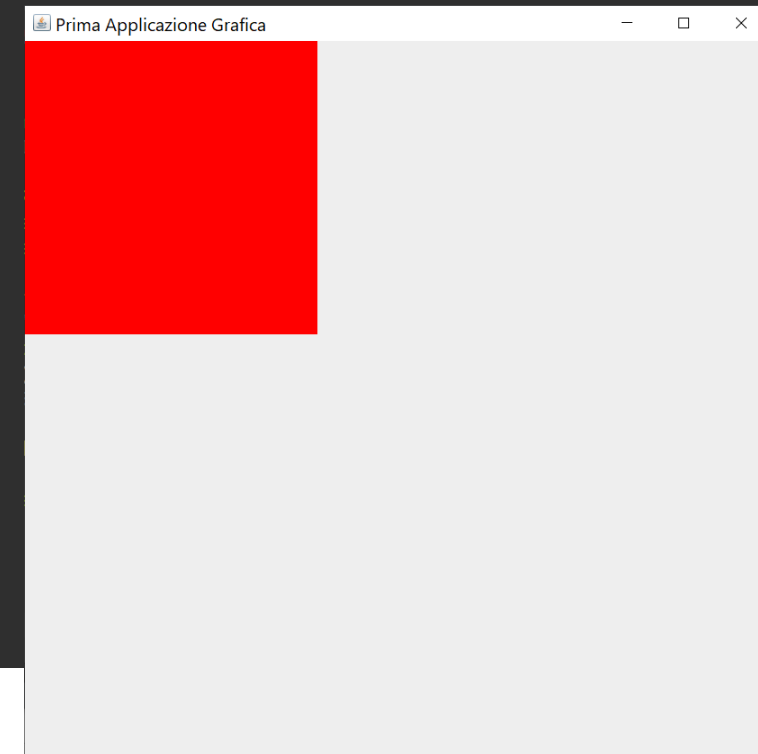
# Creazione di un JPanel e inserimento sul JFrame

**I pannelli (pane) hanno lo scopo di organizzare le componenti atomiche nella finestra, semplificandone il posizionamento.**



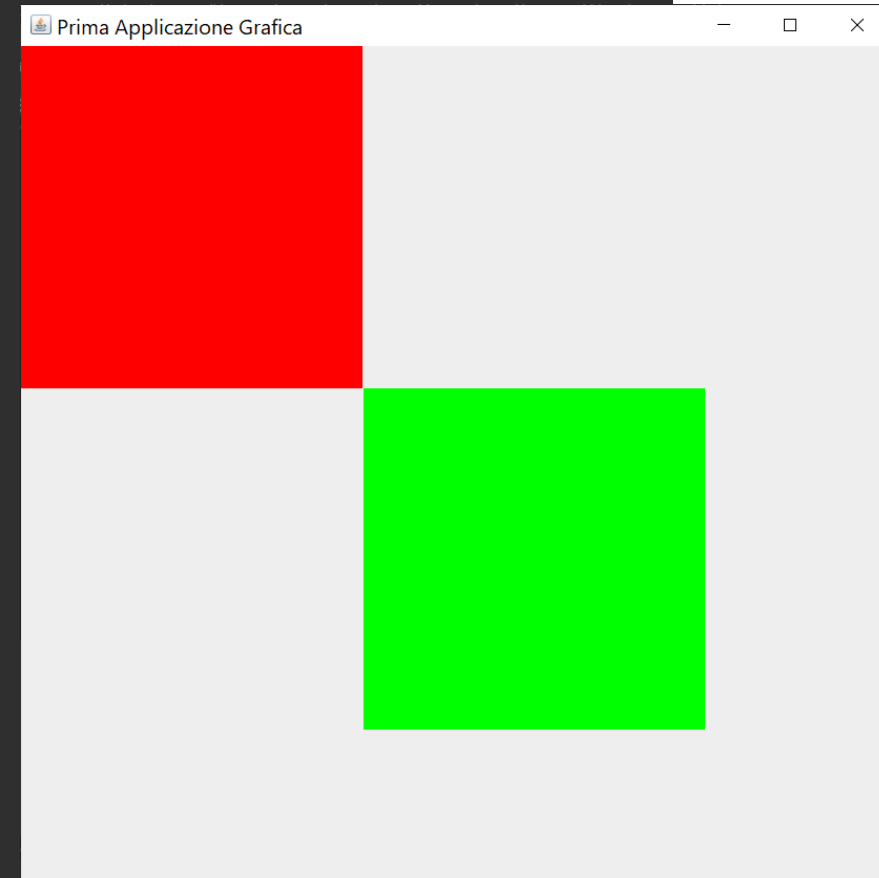
# Creazione di un JPanel e inserimento sul JFrame

```
public class Main {  
    public static void main(String[] args) {  
        //JPanel = a GUI component that functions as a container to hold other components  
  
        JPanel pannelloRosso = new JPanel() ;  
        pannelloRosso.setBackground(Color.red);  
        pannelloRosso.setBounds(0,0,250,250);  
  
        JFrame frame = new JFrame();  
        frame.setTitle("Prima Applicazione Grafica");  
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
        frame.setLayout(null);  
        frame.setSize(650,650);  
  
        frame.add(pannelloRosso);  
  
        frame.setVisible(true);  
    } //main  
} //class
```



# Creazione di un JPanel e inserimento sul JFrame

```
public class Main {  
    public static void main(String[] args) {  
        //JPanel = a GUI component that functions as a container to hold other components  
        JPanel pannelloRosso = new JPanel() ;  
        pannelloRosso.setBackground(Color.red);  
        pannelloRosso.setBounds(0,0,250,250);  
  
        JPanel pannelloVerde = new JPanel() ;  
        pannelloVerde.setBackground(Color.green);  
        pannelloVerde.setBounds(250,250,250,250);  
  
        JFrame frame = new JFrame();  
        frame.setTitle("Prima Applicazione Grafica");  
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
        frame.setLayout(null);  
        frame.setSize(650,650);  
  
        frame.add(pannelloRosso);  
        frame.add(pannelloVerde);  
  
        frame.setVisible(true);  
    } //main  
} //class
```



# Creazione di un JPanel e inserimento sul JFrame

```
//JPanel = a GUI component that functions as a container to hold other components
JPanel pannelloRosso = new JPanel() ;
pannelloRosso.setBackground(Color.red);
pannelloRosso.setBounds(0,0,250,250);

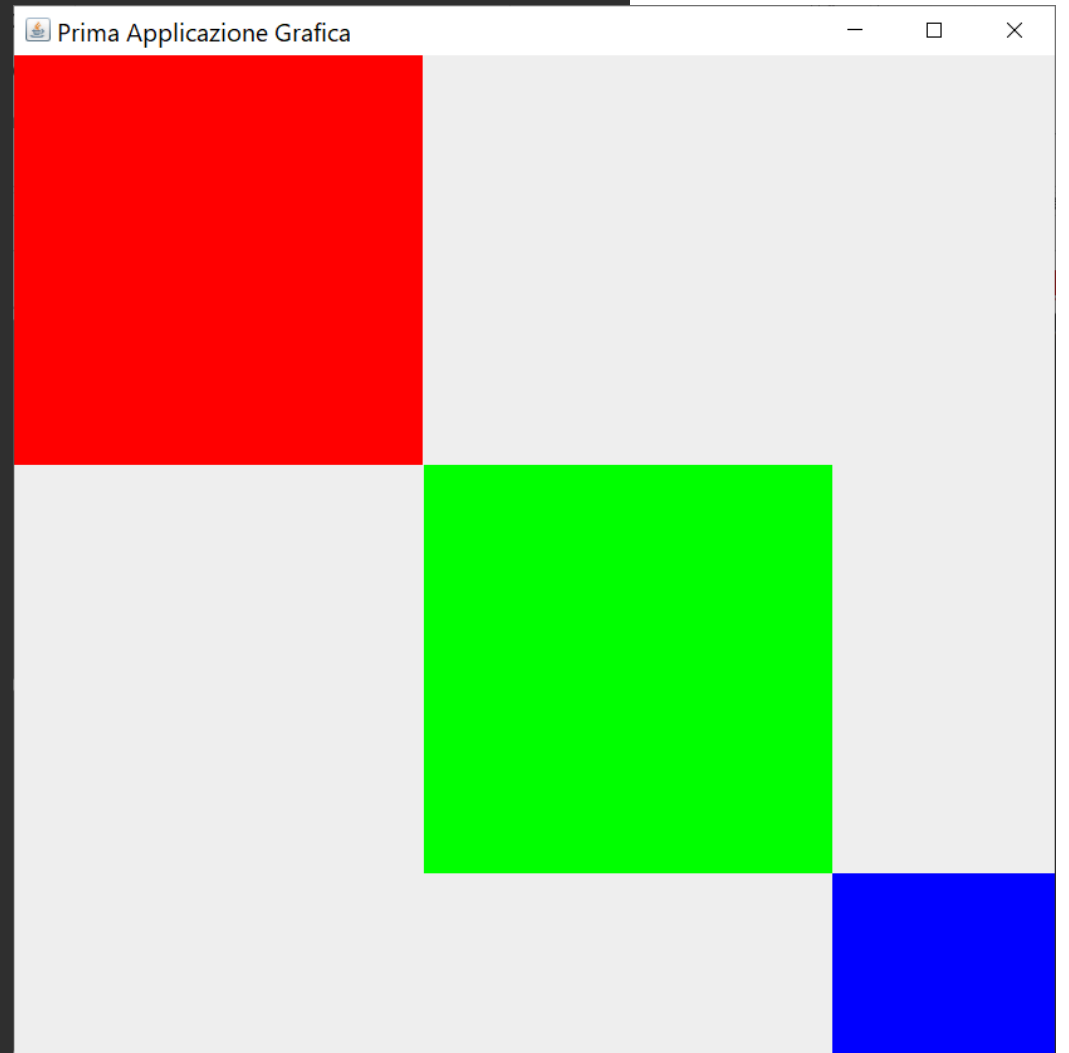
JPanel pannelloVerde = new JPanel() ;
pannelloVerde.setBackground(Color.green);
pannelloVerde.setBounds(250,250,250,250);

JPanel pannelloBlu = new JPanel() ;
pannelloBlu.setBackground(Color.blue);
pannelloBlu.setBounds(500,500,150,150);

JFrame frame = new JFrame();
frame.setTitle("Prima Applicazione Grafica");
frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
frame.setLayout(null);
frame.setSize(650,650);

frame.add(pannelloRosso);
frame.add(pannelloVerde);
frame.add(pannelloBlu);

frame.setVisible(true);
```



# Aggiungere una JLabel in un JPanel (*frame.setLayout(null);*)

```
ImageIcon icon = new ImageIcon("img/sorriso.jpg");

JLabel label = new JLabel();
label.setText("Ciao da Homer");
label.setIcon(icon);
label.setVerticalAlignment(JLabel.CENTER);

//JPanel = a GUI component that functions as a container
JPanel pannelloRosso = new JPanel();
pannelloRosso.setBackground(Color.red);
pannelloRosso.setBounds(0,0,250,250);
pannelloRosso.add(label);
```

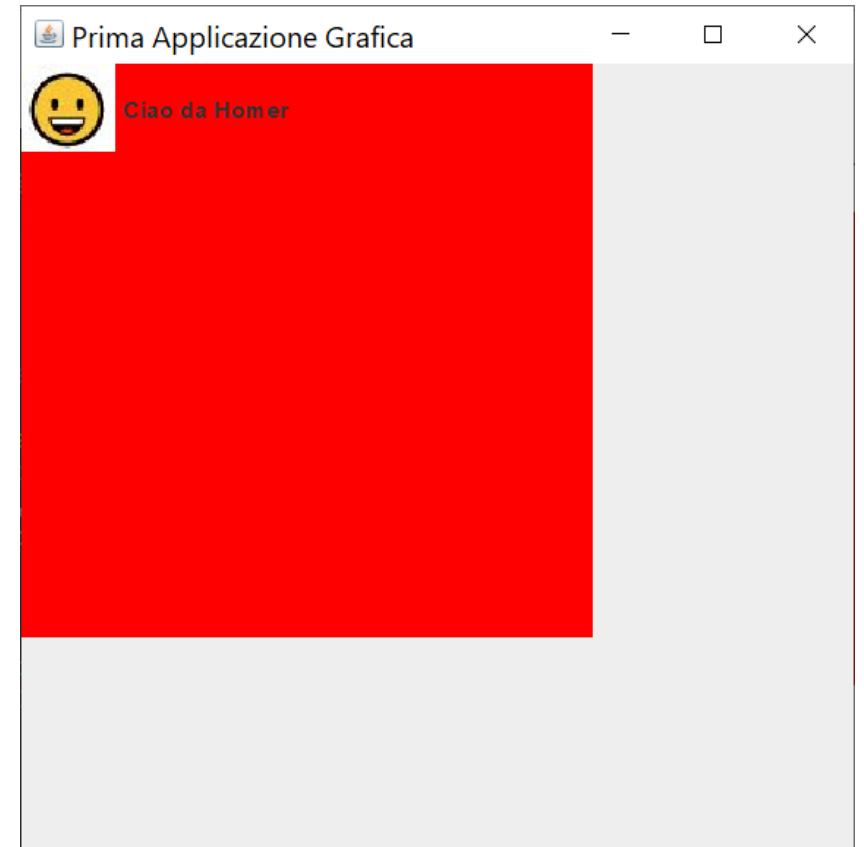


`pannelloVerde.add(label);`

`pannello.add(label);`

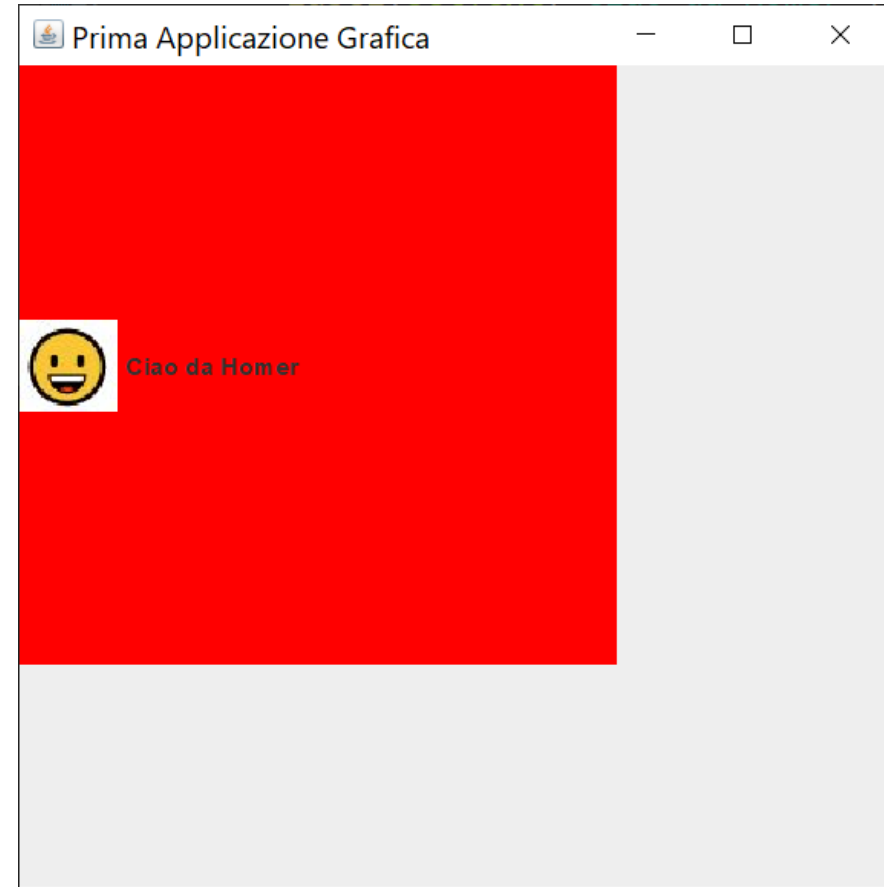
# Posizionare una JLabel in un JPanel (BorderLayout)

```
public class Main {  
    public static void main(String[] args) {  
  
        ImageIcon icon = new ImageIcon("img/sorriso.jpg");  
        JLabel label = new JLabel();  
        label.setText("Ciao da Homer");  
        label.setIcon(icon);  
        label.setVerticalAlignment(JLabel.TOP);  
  
        JPanel pannelloRosso = new JPanel() ;  
        pannelloRosso.setBackground(Color.red);  
        pannelloRosso.setBounds(0,0,300,300);  
        pannelloRosso.setLayout(new BorderLayout());  
        pannelloRosso.add(label);  
  
        JFrame frame = new JFrame();  
        frame.setTitle("Prima Applicazione Grafica");  
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
        frame.setLayout(null);  
        frame.setSize(450,450);  
  
        frame.add(pannelloRosso);  
        frame.setVisible(true);  
    }  
}
```



# Posizionare una JLabel in un JPanel (BorderLayout)

```
public class Main {  
    public static void main(String[] args) {  
  
        ImageIcon icon = new ImageIcon("img/sorriso.jpg");  
        JLabel label = new JLabel();  
        label.setText("Ciao da Homer");  
        label.setIcon(icon);  
        label.setVerticalAlignment(JLabel.CENTER);  
  
        JPanel pannelloRosso = new JPanel() ;  
        pannelloRosso.setBackground(Color.red);  
        pannelloRosso.setBounds(0,0,300,300);  
        pannelloRosso.setLayout(new BorderLayout());  
        pannelloRosso.add(label);  
  
        JFrame frame = new JFrame();  
        frame.setTitle("Prima Applicazione Grafica");  
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
        frame.setLayout(null);  
        frame.setSize(450,450);  
  
        frame.add(pannelloRosso);  
        frame.setVisible(true);  
    }  
}
```

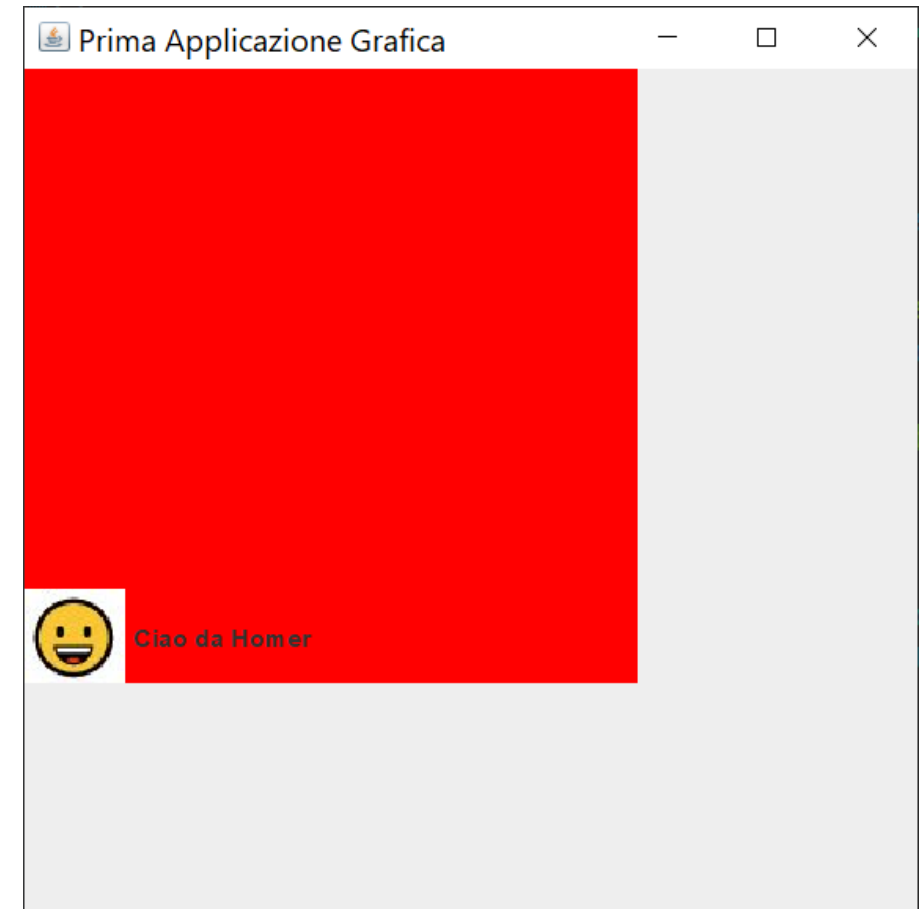


`frame.setLayout(null);`



# Posizionare una JLabel in un JPanel (BorderLayout)

```
public class Main {  
    public static void main(String[] args) {  
  
        ImageIcon icon = new ImageIcon("img/sorriso.jpg");  
        JLabel label = new JLabel();  
        label.setText("Ciao da Homer");  
        label.setIcon(icon);  
        label.setVerticalAlignment(JLabel.BOTTOM);  
  
        JPanel pannelloRosso = new JPanel() ;  
        pannelloRosso.setBackground(Color.red);  
        pannelloRosso.setBounds(0,0,300,300);  
        pannelloRosso.setLayout(new BorderLayout());  
        pannelloRosso.add(label);  
  
        JFrame frame = new JFrame();  
        frame.setTitle("Prima Applicazione Grafica");  
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
        frame.setLayout(null);  
        frame.setSize(450,450);  
  
        frame.add(pannelloRosso);  
        frame.setVisible(true);  
    } //main  
} //class
```



```

public class Main {
    public static void main(String[] args) {

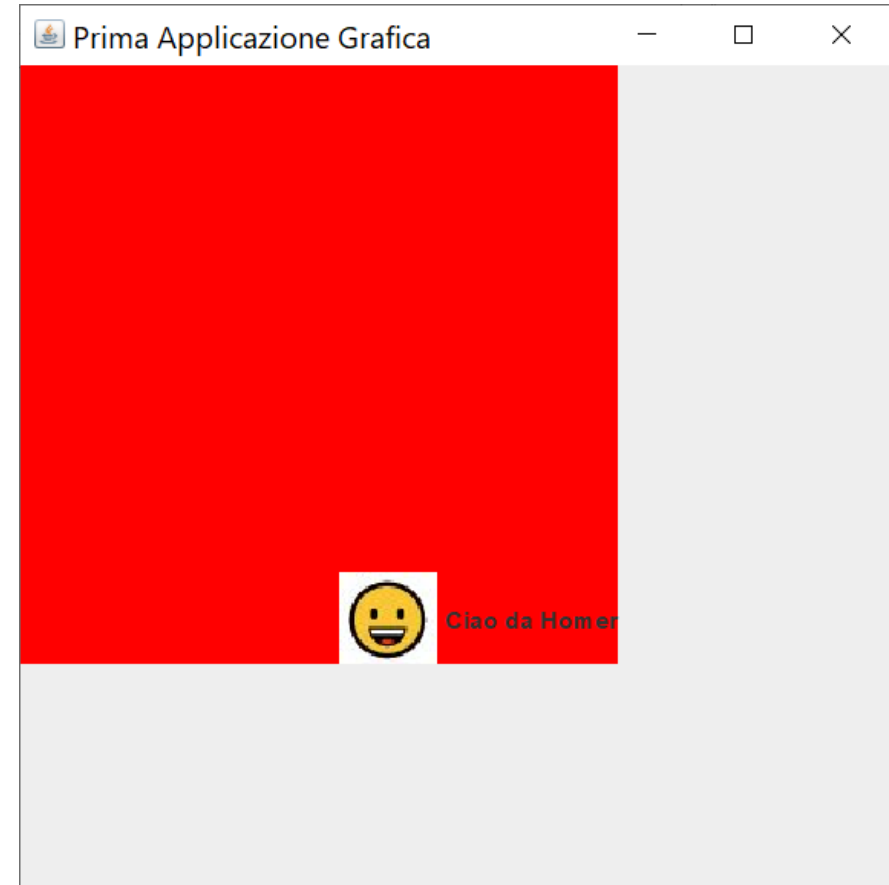
        ImageIcon icon = new ImageIcon("img/sorriso.jpg");
        JLabel label = new JLabel();
        label.setText("Ciao da Homer");
        label.setIcon(icon);
        label.setVerticalAlignment(JLabel.BOTTOM);
        label.setHorizontalAlignment(JLabel.RIGHT);

        JPanel pannelloRosso = new JPanel() ;
        pannelloRosso.setBackground(Color.red);
        pannelloRosso.setBounds(0,0,300,300);
        pannelloRosso.setLayout(new BorderLayout());
        pannelloRosso.add(label);

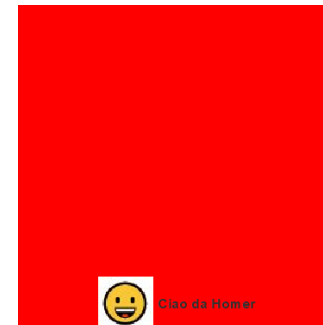
        JFrame frame = new JFrame();
        frame.setTitle("Prima Applicazione Grafica");
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.setLayout(null);
        frame.setSize(450,450);

        frame.add(pannelloRosso);
        frame.setVisible(true);
    } //main
} //class

```



label.setHorizontalAlignment(JLabel.CENTER);



```
public class Main {  
    public static void main(String[] args) {  
  
        ImageIcon icon = new ImageIcon("img/sorriso.jpg");  
        JLabel label = new JLabel();  
        label.setText("Ciao da Homer");  
        label.setIcon(icon);  
        label.setVerticalAlignment(JLabel.BOTTOM);  
        label.setHorizontalAlignment(JLabel.LEFT);  
  
        JPanel pannelloRosso = new JPanel() ;  
        pannelloRosso.setBackground(Color.red);  
        pannelloRosso.setBounds(0,0,300,300);  
        pannelloRosso.setLayout(new BorderLayout());  
        pannelloRosso.add(label);  
  
        JFrame frame = new JFrame();  
        frame.setTitle("Prima Applicazione Grafica");  
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
        frame.setLayout(null);  
        frame.setSize(450,450);  
  
        frame.add(pannelloRosso);  
        frame.setVisible(true);  
    }  
}
```

