

JRadioButton

```
public class left RadioButtonExample extends JFrame implements ActionListener {
```

```
    JRadioButton leftButton, centerButton, rightButton;  
    String names[] = {"LEFT", "CENTER", "RIGHT"};  
    ...
```

```
    private void initGUI() {
```

```
        ...  
        leftButton = new JRadioButton(names[0]);  
        leftButton.addActionListener(this);  
        leftButton.setSelected(true);  
        centerButton = new JRadioButton(names[1]);  
        centerButton.addActionListener(this);  
        rightButton = new JRadioButton(names[2]);  
        rightButton.addActionListener(this);
```

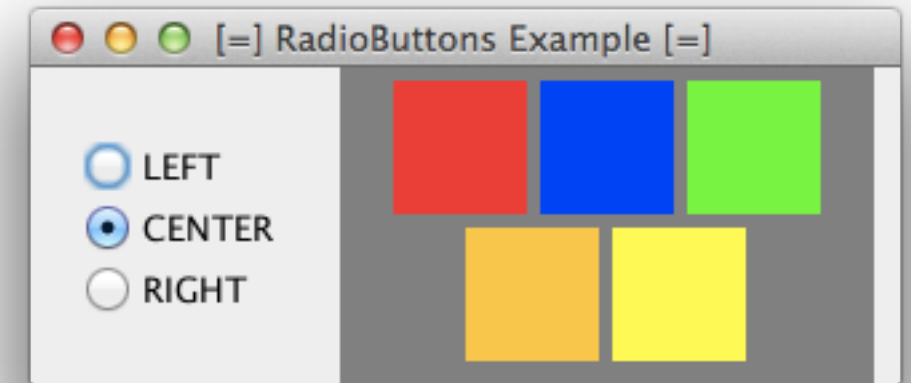
```
        ButtonGroup btnGroup = new ButtonGroup();  
        btnGroup.add(leftButton);  
        btnGroup.add(centerButton);  
        btnGroup.add(rightButton);  
        ...
```

```
    }
```

```
    public void actionPerformed(ActionEvent e) {  
        if ( e.getSource() == leftButton ) ...  
        else if ( e.getSource() == centerButton ) ...  
        else if ( e.getSource() == rightButton ) ...  
    }
```

```
}
```

see: [examples.swing.misc.RadioButtonExample](#)



JRadioButton

```
public class left RadioButtonExample extends JFrame implements ActionListener {
```

```
JRadioButton leftButton, centerButton, rightButton;  
String names[] = {"LEFT", "CENTER", "RIGHT"};
```

```
...
```

```
private void initGUI() {
```

```
...
```

```
leftButton = new JRadioButton(names[0]);  
leftButton.addActionListener(this);  
leftButton.setSelected(true);  
centerButton = new JRadioButton(names[1]);  
centerButton.addActionListener(this);  
rightButton = new JRadioButton(names[2]);  
rightButton.addActionListener(this);
```

```
ButtonGroup btnGroup = new ButtonGroup();  
btnGroup.add(leftButton);  
btnGroup.add(centerButton);  
btnGroup.add(rightButton);
```

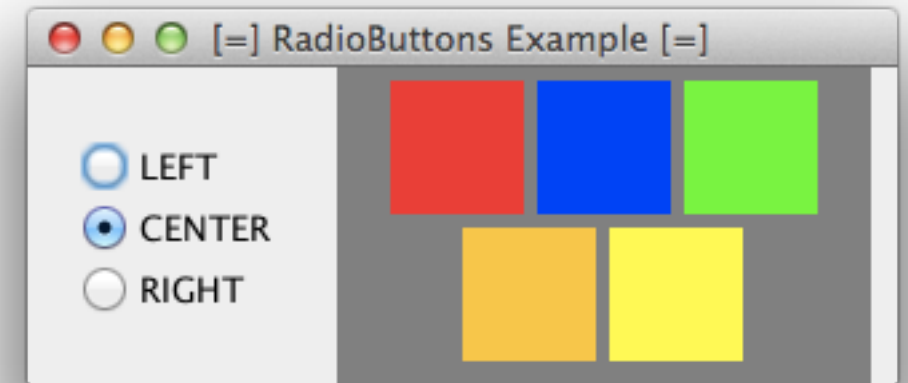
```
...
```

```
}
```

```
public void actionPerformed(ActionEvent e) {  
    if ( e.getSource() == leftButton ) ...  
    else if ( e.getSource() == centerButton ) ...  
    else if ( e.getSource() == rightButton ) ...  
}
```

```
}
```

see: [examples.swing.misc.RadioButtonExample](#)



JRadioButton

```
public class left RadioButtonExample extends JFrame implements ActionListener {
```

```
    JRadioButton leftButton, centerButton, rightButton;  
    String names[] = {"LEFT", "CENTER", "RIGHT"};
```

```
    ...
```

```
    private void initGUI() {
```

```
        ...
```

```
        leftButton = new JRadioButton(names[0]);
```

```
        leftButton.addActionListener(this);
```

```
        leftButton.setSelected(true);
```

```
        centerButton = new JRadioButton(names[1]);
```

```
        centerButton.addActionListener(this);
```

```
        rightButton = new JRadioButton(names[2]);
```

```
        rightButton.addActionListener(this);
```

```
        ButtonGroup btnGroup = new ButtonGroup();
```

```
        btnGroup.add(leftButton);
```

```
        btnGroup.add(centerButton);
```

```
        btnGroup.add(rightButton);
```

```
        ...
```

```
    }
```

```
    public void actionPerformed(ActionEvent e) {
```

```
        if ( e.getSource() == leftButton ) ...
```

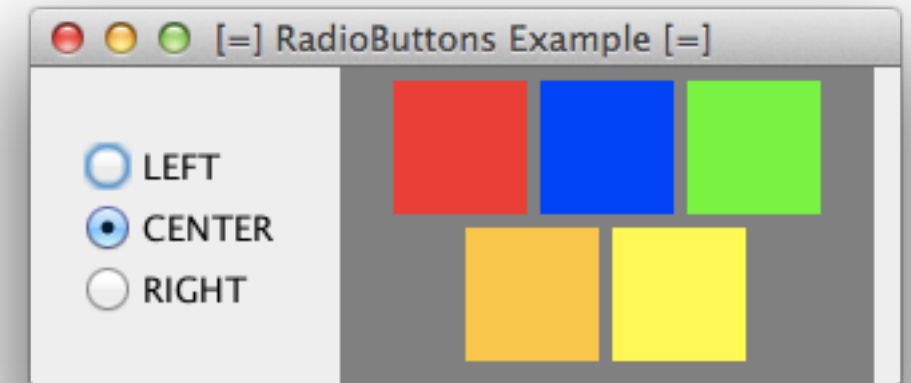
```
        else if ( e.getSource() == centerButton ) ...
```

```
        else if ( e.getSource() == rightButton ) ...
```

```
    }
```

```
}
```

see: [examples.swing.misc.RadioButtonExample](#)



JRadioButton

```
public class left RadioButtonExample extends JFrame implements ActionListener {
```

```
    JRadioButton leftButton, centerButton, rightButton;  
    String names[] = {"LEFT", "CENTER", "RIGHT"};
```

```
    ...
```

```
    private void initGUI() {
```

```
        ...
```

```
        leftButton = new JRadioButton(names[0]);
```

```
        leftButton.addActionListener(this);
```

```
        leftButton.setSelected(true);
```

```
        centerButton = new JRadioButton(names[1]);
```

```
        centerButton.addActionListener(this);
```

```
        rightButton = new JRadioButton(names[2]);
```

```
        rightButton.addActionListener(this);
```

```
        ButtonGroup btnGroup = new ButtonGroup();
```

```
        btnGroup.add(leftButton);
```

```
        btnGroup.add(centerButton);
```

```
        btnGroup.add(rightButton);
```

```
        ...
```

```
    }
```

```
    public void actionPerformed(ActionEvent e) {
```

```
        if ( e.getSource() == leftButton ) ...
```

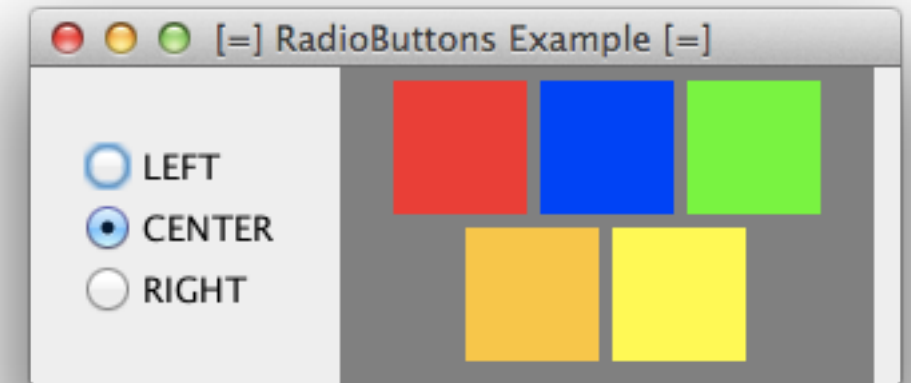
```
        else if ( e.getSource() == centerButton ) ...
```

```
        else if ( e.getSource() == rightButton ) ...
```

```
    }
```

```
}
```

see: [examples.swing.misc.RadioButtonExample](#)



JRadioButton

```
public class left RadioButtonExample extends JFrame implements ActionListener {
```

```
    JRadioButton leftButton, centerButton, rightButton;  
    String names[] = {"LEFT", "CENTER", "RIGHT"};
```

```
    ...
```

```
    private void initGUI() {
```

```
        ...
```

```
        leftButton = new JRadioButton(names[0]);  
        leftButton.addActionListener(this);
```

```
        leftButton.setSelected(true);
```

```
        centerButton = new JRadioButton(names[1]);  
        centerButton.addActionListener(this);
```

```
        rightButton = new JRadioButton(names[2]);  
        rightButton.addActionListener(this);
```

```
        ButtonGroup btnGroup = new ButtonGroup();  
        btnGroup.add(leftButton);  
        btnGroup.add(centerButton);  
        btnGroup.add(rightButton);
```

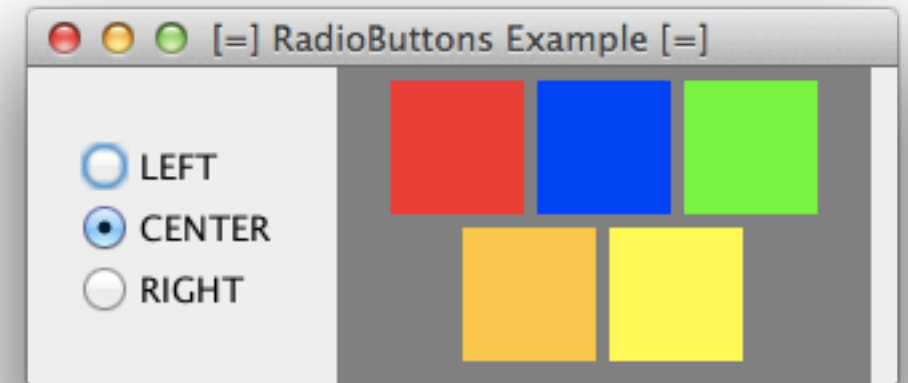
```
        ...
```

```
    }
```

```
    public void actionPerformed(ActionEvent e) {  
        if ( e.getSource() == leftButton ) ...  
        else if ( e.getSource() == centerButton ) ...  
        else if ( e.getSource() == rightButton ) ...  
    }
```

```
}
```

see: [examples.swing.misc.RadioButtonExample](#)



JRadioButton

```
public class left RadioButtonExample extends JFrame implements ActionListener {
```

```
    JRadioButton leftButton, centerButton, rightButton;  
    String names[] = {"LEFT", "CENTER", "RIGHT"};  
    ...
```

```
    private void initGUI() {
```

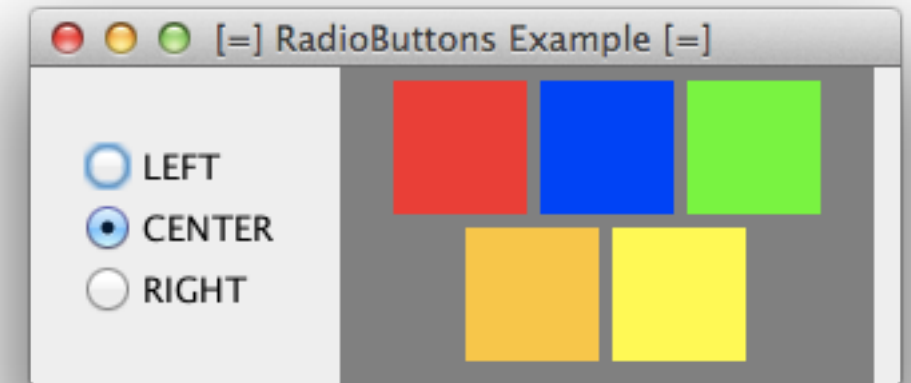
```
        ...  
        leftButton = new JRadioButton(names[0]);  
        leftButton.addActionListener(this);  
        leftButton.setSelected(true);  
        centerButton = new JRadioButton(names[1]);  
        centerButton.addActionListener(this);  
        rightButton = new JRadioButton(names[2]);  
        rightButton.addActionListener(this);
```

```
        ButtonGroup btnGroup = new ButtonGroup();  
        btnGroup.add(leftButton);  
        btnGroup.add(centerButton);  
        btnGroup.add(rightButton);
```

```
        ...  
    }
```

```
    public void actionPerformed(ActionEvent e) {  
        if ( e.getSource() == leftButton ) ...  
        else if ( e.getSource() == centerButton ) ...  
        else if ( e.getSource() == rightButton ) ...  
    }
```

```
}  
see: examples.swing.misc.RadioButtonExample
```



JRadioButton

```
public class left RadioButtonExample extends JFrame implements ActionListener {
```

```
    JRadioButton leftButton, centerButton, rightButton;  
    String names[] = {"LEFT", "CENTER", "RIGHT"};  
    ...
```

```
    private void initGUI() {
```

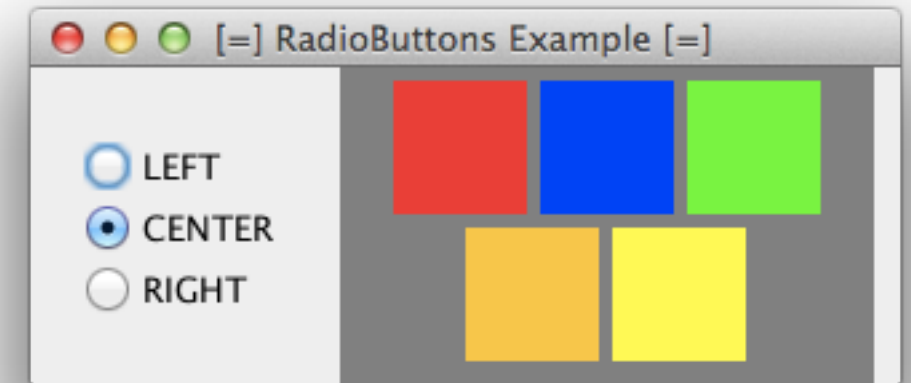
```
        ...  
        leftButton = new JRadioButton(names[0]);  
        leftButton.addActionListener(this);  
        leftButton.setSelected(true);  
        centerButton = new JRadioButton(names[1]);  
        centerButton.addActionListener(this);  
        rightButton = new JRadioButton(names[2]);  
        rightButton.addActionListener(this);
```

```
        ButtonGroup btnGroup = new ButtonGroup();  
        btnGroup.add(leftButton);  
        btnGroup.add(centerButton);  
        btnGroup.add(rightButton);
```

```
        ...
```

```
    }  
  
    public void actionPerformed(ActionEvent e) {  
        if ( e.getSource() == leftButton ) ...  
        else if ( e.getSource() == centerButton ) ...  
        else if ( e.getSource() == rightButton ) ...  
    }  
}
```

see: [examples.swing.misc.RadioButtonExample](#)



JRadioButton

```
public class left RadioButtonExample extends JFrame implements ActionListener {
```

```
JRadioButton leftButton, centerButton, rightButton;  
String names[] = {"LEFT", "CENTER", "RIGHT"};  
...
```

```
private void initGUI() {
```

```
...  
leftButton = new JRadioButton(names[0]);  
leftButton.addActionListener(this);  
leftButton.setSelected(true);  
centerButton = new JRadioButton(names[1]);  
centerButton.addActionListener(this);  
rightButton = new JRadioButton(names[2]);  
rightButton.addActionListener(this);
```

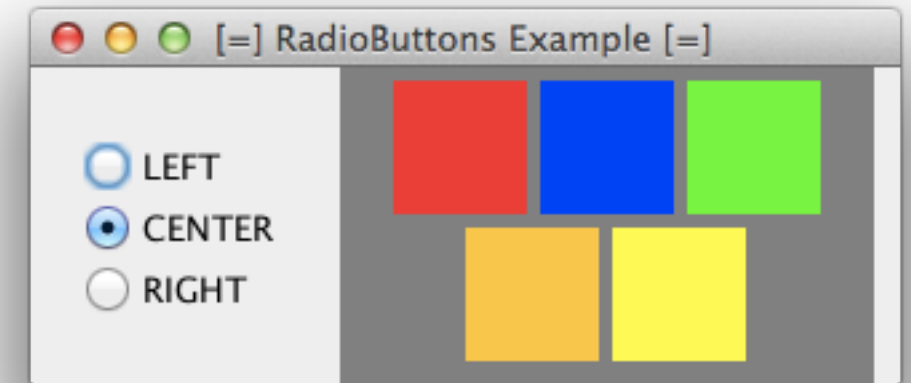
```
ButtonGroup btnGroup = new ButtonGroup();  
btnGroup.add(leftButton);  
btnGroup.add(centerButton);  
btnGroup.add(rightButton);  
...
```

```
}
```

```
public void actionPerformed(ActionEvent e) {  
    if ( e.getSource() == leftButton ) ...  
    else if ( e.getSource() == centerButton ) ...  
    else if ( e.getSource() == rightButton ) ...  
}
```

```
}
```

see: [examples.swing.misc.RadioButtonExample](#)



Cuál es la diferencia entre el **ActionListener** y el **ItemListener** en este caso? Cuantas veces invocamos los métodos correspondientes cuando seleccionamos una opción?