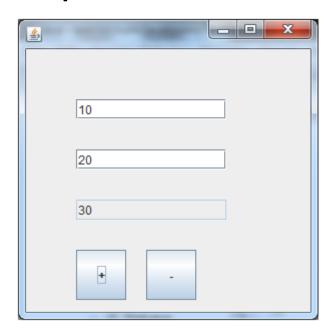
#### Simple Calculator

```
1. import javax.swing.*;
2. import java.awt.event.*;
3. public class TextFieldExample implements ActionListener{
4. JTextField tf1,tf2,tf3;
5. JButton b1,b2;
6. TextFieldExample(){
7. JFrame f= new JFrame();
8. tf1=new JTextField();
9. tf1.setBounds(50,50,150,20);
10. tf2=new JTextField();
11. tf2.setBounds(50,100,150,20);
12. tf3=new JTextField();
13. tf3.setBounds(50,150,150,20);
14. tf3.setEditable(false);
15. b1=new JButton("+");
16. b1.setBounds(50,200,50,50);
17. b2=new JButton("-");
18. b2.setBounds(120,200,50,50);
19. b1.addActionListener(this);
20. b2.addActionListener(this);
21. f.add(tf1);f.add(tf2);f.add(tf3);f.add(b1);f.add(b2);
22. f.setSize(300,300);
23. f.setLayout(null);
24. f.setVisible(true);
25.}
26. public void actionPerformed(ActionEvent e) {
27. String s1=tf1.getText();
28. String s2=tf2.getText();
29. int a=Integer.parseInt(s1);
30. int b=Integer.parseInt(s2);
31. int c=0;
32. if(e.getSource()==b1){}
       a. c=a+b;
33. else if(e.getSource()==b2){
       a. c=a-b;
34.}
```

```
35. String result=String.valueOf(c);
36. tf3.setText(result);
37. }
38. public static void main(String[] args) {
39. new TextFieldExample();
40. } }
```

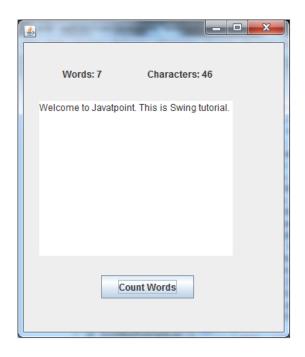


# Program 2: Write a Java Program to count number of words anf characters from TextArea entered by user

```
1. import javax.swing.*;
```

- 2. **import** java.awt.event.\*;
- 3. **public class** TextAreaExample **implements** ActionListener{
- 4. JLabel 11,12;
- 5. JTextArea area;
- 6. JButton b;
- 7. TextAreaExample() {
- 8. JFrame f= **new** JFrame();
- 9. I1=**new** JLabel();
- 10. l1.setBounds(50,25,100,30);

```
l2=new JLabel();
11.
12.
     I2.setBounds(160,25,100,30);
13. area=new JTextArea();
14. area.setBounds(20,75,250,200);
15. b=new JButton("Count Words");
16.
     b.setBounds(100,300,120,30);
17.
     b.addActionListener(this);
18.
     f.add(l1);f.add(l2);f.add(area);f.add(b);
19. f.setSize(450,450);
20.
     f.setLayout(null);
21.
     f.setVisible(true);
22.}
23. public void actionPerformed(ActionEvent e){
     String text=area.getText();
25.
     String words[]=text.split("\\s");
     I1.setText("Words: "+words.length);
26.
27.
     12.setText("Characters: "+text.length());
28.}
29. public static void main(String[] args) {
     new TextAreaExample();
31.}
32.}
```



#### **Program 3: Action Listener for Login Form**

```
1. import javax.swing.*;
2. import java.awt.event.*;
3. public class PasswordFieldExample {
4.
      public static void main(String[] args) {
5.
     JFrame f=new JFrame("Password Field Example");
6.
      final JLabel label = new JLabel();
7.
      label.setBounds(20,150, 200,50);
8.
      final JPasswordField value = new JPasswordField();
9.
      value.setBounds(100,75,100,30);
10.
      JLabel I1=new JLabel("Username:");
11.
        11.setBounds(20,20, 80,30);
12.
        JLabel I2=new JLabel("Password:");
13.
        12.setBounds(20,75, 80,30);
14.
        JButton b = new JButton("Login");
15.
        b.setBounds(100,120, 80,30);
16.
        final JTextField text = new JTextField();
17.
        text.setBounds(100,20, 100,30);
18.
             f.add(value); f.add(l1); f.add(label); f.add(l2); f.add(b); f.add(text);
19.
             f.setSize(300,300);
20.
             f.setLayout(null);
```

```
21.
             f.setVisible(true);
22.
             b.addActionListener(new ActionListener() {
23.
             public void actionPerformed(ActionEvent e) {
               String data = "Username" + text.getText();
24.
25.
               data += ", Password: "
               + new String(value.getPassword());
26.
27.
               label.setText(data);
28.
             }
29.
           });
30.}
31.}
```

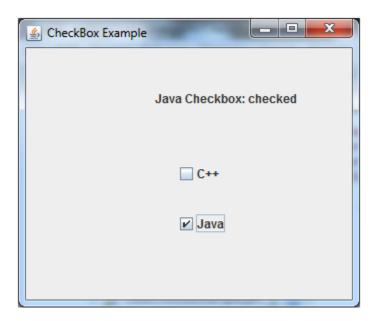
:



# **Program 4: CheckBox with ItemListner**

```
    import javax.swing.*;
    import java.awt.event.*;
    public class CheckBoxExample
    {
```

```
5.
      CheckBoxExample(){
6.
        JFrame f= new JFrame("CheckBox Example");
7.
        final JLabel label = new JLabel();
8.
        label.setHorizontalAlignment(JLabel.CENTER);
9.
        label.setSize(400,100);
10.
11.
        JCheckBox checkbox1 = new JCheckBox("C++");
12.
        checkbox1.setBounds(150,100, 50,50);
13.
        JCheckBox checkbox2 = new JCheckBox("Java");
14.
        checkbox2.setBounds(150,150, 50,50);
15.
16.
        f.add(checkbox1); f.add(checkbox2); f.add(label);
17.
        checkbox1.addItemListener(new ItemListener() {
18.
19.
           public void itemStateChanged(ItemEvent e) {
20.
             label.setText("C++ Checkbox: "
             + (e.getStateChange()==1?"checked":"unchecked"));
21.
22.
          }
23.
         });
24.
25.
       checkbox2.addItemListener(new ItemListener() {
<mark>26.</mark>
           public void itemStateChanged(ItemEvent e) {
             label.setText("Java Checkbox: "
27.
28.
             + (e.getStateChange()==1?"checked":"unchecked"));
29.
          }
30.
         });
31.
32.
        f.setSize(400,400);
33.
        f.setLayout(null);
34.
        f.setVisible(true);
35.
36. public static void main(String args[])
37. {
38.
     new CheckBoxExample();
39.}
40.}
```



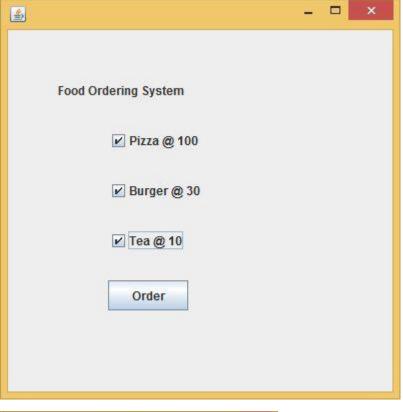
Program 5: Food Ordering JFrame

16.

b=**new** JButton("Order");

```
1. import javax.swing.*;
2. import java.awt.event.*;
3. public class CheckBoxExample extends JFrame implements ActionListener{
4.
     JLabel I;
     JCheckBox cb1,cb2,cb3;
5.
6.
     JButton b;
7.
     CheckBoxExample(){
8.
        l=new JLabel("Food Ordering System");
9.
        l.setBounds(50,50,300,20);
10.
        cb1=new JCheckBox("Pizza @ 100");
11.
        cb1.setBounds(100,100,150,20);
12.
       cb2=new JCheckBox("Burger @ 30");
13.
        cb2.setBounds(100,150,150,20);
14.
        cb3=new JCheckBox("Tea @ 10");
15.
        cb3.setBounds(100,200,150,20);
```

```
17.
        b.setBounds(100,250,80,30);
18.
        b.addActionListener(this);
19.
        add(l);add(cb1);add(cb2);add(cb3);add(b);
20.
        setSize(400,400);
21.
        setLayout(null);
22.
        setVisible(true);
23.
        setDefaultCloseOperation(EXIT_ON_CLOSE);
24.
25.
     public void actionPerformed(ActionEvent e){
26.
        float amount=0;
27.
        String msg="";
28.
        if ( cb1.isSelected() ) {
29.
          amount + = 100;
30.
          msg="Pizza: 100\n";
31.
        }
       if ( cb2.isSelected() ) {
32.
33.
          amount + = 30;
34.
          msg+="Burger: 30\n";
35.
36.
        if ( cb3.isSelected() ) {
37.
          amount + = 10;
38.
          msg+="Tea: 10\n";
39.
        }
40.
        msg+="----\n";
41.
42.
      JOptionPane.showMessageDialog( this, msg+"Total: "+amount );
43.
     }
44.
     public static void main(String[] args) {
45.
        new CheckBoxExample();
46.
     }
47.}
```





# Java JRadioButton Example with ActionListener

- 1. **import** javax.swing.\*;
- 2. **import** java.awt.event.\*;
- 3. class RadioButtonExample extends JFrame implements ActionListener{
- 4. JRadioButton rb1,rb2;
- 5. JButton b;
- 6. RadioButtonExample(){
- 7. rb1=**new** JRadioButton("Male");
- 8. rb1.setBounds(100,50,100,30);

```
9. rb2=new JRadioButton("Female");
10. rb2.setBounds(100,100,100,30);
11. ButtonGroup bg=new ButtonGroup();
12. bg.add(rb1);bg.add(rb2);
13. b=new JButton("click");
14. b.setBounds(100,150,80,30);
15. b.addActionListener(this);
16. add(rb1);add(rb2);add(b);
17. setSize(300,300);
18. setLayout(null);
19. setVisible(true);
20.}
21. public void actionPerformed(ActionEvent e){
22. if(rb1.isSelected()){
23. JOptionPane.showMessageDialog(this, "You are Male.");
24.}
25. if(rb2.isSelected()){
26. JOptionPane.showMessageDialog(this, "You are Female.");
27.}
28.}
29. public static void main(String args[]){
30. new RadioButtonExample();
31.}}
```



#### Java JCheckBox Example with ItemListener

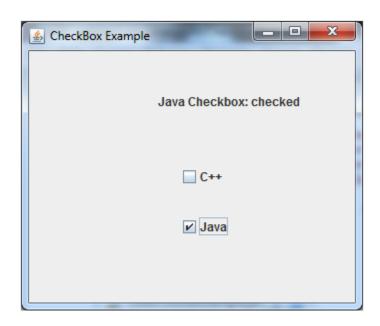
```
1. import javax.swing.*;
2. import java.awt.event.*;
3. public class CheckBoxExample
4. {
5.
      CheckBoxExample(){
6.
        JFrame f = new JFrame("CheckBox Example");
7.
        final JLabel label = new JLabel();
8.
        label.setHorizontalAlignment(JLabel.CENTER);
9.
        label.setSize(400,100);
10.
11.
        JCheckBox checkbox1 = new JCheckBox("C++");
12.
        checkbox1.setBounds(150,100, 50,50);
13.
14.
        JCheckBox checkbox2 = new JCheckBox("Java");
15.
        checkbox2.setBounds(150,150, 50,50);
16.
17.
        f.add(checkbox1); f.add(checkbox2); f.add(label);
18.
19.
        checkbox1.addItemListener(new ItemListener() {
20.
           public void itemStateChanged(ItemEvent e) {
21.
             label.setText("C++ Checkbox: "
22.
             + (e.getStateChange()==1?"checked":"unchecked"));
23.
           }
24.
         });
```

```
checkbox2.addItemListener(new ItemListener() {
    public void itemStateChanged(ItemEvent e) {
        label.setText("Java Checkbox: "
        + (e.getStateChange()==1?"checked":"unchecked"));
    }
}
```

```
31. f.setSize(400,400);
```

<sup>32.</sup> f.setLayout(null);

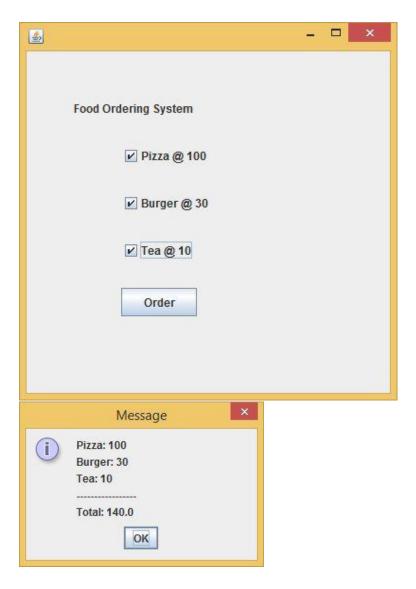
```
33. f.setVisible(true);
34. }
35. public static void main(String args[])
36. {
37. new CheckBoxExample();
38. }
39. }
```



## Java JCheckBox Example: Food Order

```
1. import javax.swing.*;
2. import java.awt.event.*;
3. public class CheckBoxExample extends JFrame implements ActionListener{
     JLabel I;
4.
5.
     JCheckBox cb1,cb2,cb3;
6.
     JButton b;
7.
     CheckBoxExample(){
8.
        l=new JLabel("Food Ordering System");
9.
        l.setBounds(50,50,300,20);
10.
       cb1=new JCheckBox("Pizza @ 100");
11.
       cb1.setBounds(100,100,150,20);
        cb2=new JCheckBox("Burger @ 30");
12.
13.
        cb2.setBounds(100,150,150,20);
```

```
14.
        cb3=new JCheckBox("Tea @ 10");
15.
        cb3.setBounds(100,200,150,20);
16.
        b=new JButton("Order");
17.
        b.setBounds(100,250,80,30);
18.
        b.addActionListener(this);
19.
        add(l);add(cb1);add(cb2);add(cb3);add(b);
20.
        setSize(400,400);
21.
        setLayout(null);
22.
        setVisible(true);
23.
        setDefaultCloseOperation(EXIT_ON_CLOSE);
24.
     } // end of constructor
25.
26.
     public void actionPerformed (ActionEvent e){
27.
        float amount=0;
28.
        String msg="";
29.
        if(cb1.isSelected()){
30.
          amount + = 100;
31.
          msg="Pizza: 100\n";
32.
        }
33.
        if(cb2.isSelected()){
34.
          amount + = 30;
35.
          msg+="Burger: 30\n";
36.
        }
37.
        if(cb3.isSelected()){
38.
          amount + = 10;
39.
          msg+="Tea: 10\n";
40.
        msq+="----\n";
41.
42.
        JOptionPane.showMessageDialog(this,msg+"Total: "+amount);
43.
44.
     public static void main(String[] args) {
45.
        new CheckBoxExample();
46.
     }
47.}
```



### Java JRadioButton Example with ActionListener

- 1. **import** javax.swing.\*;
- 2. **import** java.awt.event.\*;
- 3. class RadioButtonExample extends JFrame implements ActionListener{
- 4. JRadioButton rb1,rb2;
- 5. JButton b;
- 6. RadioButtonExample(){
- 7. rb1=**new** JRadioButton("Male");
- 8. rb1.setBounds(100,50,100,30);
- 9. rb2=**new** JRadioButton("Female");
- 10. rb2.setBounds(100,100,100,30);

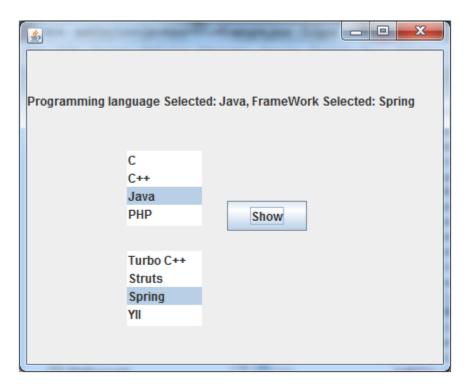
```
11. ButtonGroup bg=new ButtonGroup();
12. bg.add(rb1);bg.add(rb2);
13. b=new JButton("click");
14. b.setBounds(100,150,80,30);
15. b.addActionListener(this);
16. add(rb1);add(rb2);add(b);
17. setSize(300,300);
18. setLayout(null);
19. setVisible(true);
20.}
21. public void actionPerformed(ActionEvent e){
22. if(rb1.isSelected()){
23. JOptionPane.showMessageDialog(this, "You are Male.");
24.}
25. if(rb2.isSelected()){
26. JOptionPane.showMessageDialog(this, "You are Female.");
27.}
28.}
29. public static void main(String args[]){
30. new RadioButtonExample();
31.}}
                               4,
                                               4,
                    Male
                                                 Message
                                                         You are Male.
                   Female
                                                                   OK
                       click
```

#### Java JList Example with ActionListener

1. **import** javax.swing.\*;

```
2. import java.awt.event.*;
3. public class ListExample
4. {
5.
      ListExample(){
6.
        JFrame f= new JFrame();
7.
        final JLabel label = new JLabel();
8.
        label.setSize(500,100);
9.
        JButton b=new JButton("Show");
10.
        b.setBounds(200,150,80,30);
11.
        final DefaultListModel<String> I1 = new DefaultListModel<>();
12.
         11.addElement("C");
13.
         11.addElement("C++");
14.
         I1.addElement("Java");
15.
         11.addElement("PHP");
16.
         final JList<String> list1 = new JList<>(I1);
17.
         list1.setBounds(100,100, 75,75);
18.
         DefaultListModel<String> I2 = new DefaultListModel<>();
19.
         12.addElement("Turbo C++");
20.
         12.addElement("Struts");
21.
         12.addElement("Spring");
22.
         12.addElement("YII");
23.
         final JList<String> list2 = new JList<>(l2);
24.
         list2.setBounds(100,200, 75,75);
25.
         f.add(list1); f.add(list2); f.add(b); f.add(label);
26.
         f.setSize(450,450);
27.
         f.setLayout(null);
28.
         f.setVisible(true);
29.
         b.addActionListener(new ActionListener() {
30.
            public void actionPerformed(ActionEvent e) {
31.
              String data = "";
32.
              if (list1.getSelectedIndex() != -1) {
                data = "Programming language Selected: " + list1.getSelectedValue();
33.
34.
                label.setText(data);
35.
              }
36.
              if(list2.getSelectedIndex() != -1){
37.
                data += ", FrameWork Selected: ";
38.
                for(Object frame :list2.getSelectedValues()){
```

```
data += frame + " ";
39.
40.
                }
41.
              }
42.
              label.setText(data);
43.
            }
44.
          });
45.
46. public static void main(String args[])
47.
     new ListExample();
48.
49.
      }}
```



# Java JComboBox Example with ActionListener

```
    import javax.swing.*;
    import java.awt.event.*;
    public class ComboBoxExample {
    JFrame f;
    ComboBoxExample(){
    f=new JFrame("ComboBox Example");
```

```
7.
     final JLabel label = new JLabel();
8.
     label.setHorizontalAlignment(JLabel.CENTER);
9.
     label.setSize(400,100);
10.
     JButton b=new JButton("Show");
11.
     b.setBounds(200,100,75,20);
     String languages[]={"C","C++","C#","Java","PHP"};
12.
13.
     final JComboBox cb=new JComboBox(languages);
14.
     cb.setBounds(50, 100,90,20);
15.
     f.add(cb); f.add(label); f.add(b);
16.
     f.setLayout(null);
17.
     f.setSize(350,350);
18.
     f.setVisible(true);
19.
     b.addActionListener(new ActionListener() {
20.
        public void actionPerformed(ActionEvent e) {
21. String data = "Programming language Selected: "
22.
     + cb.getItemAt(cb.getSelectedIndex());
23. label.setText(data);
24.}
25. });
26.}
27. public static void main(String[] args) {
28.
     new ComboBoxExample();
29.}
30.}
    Programming language Selected: Java
```

Show

Java

C++ C# Java PHP