

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <form xmlns="http://www.intellij.com/uidesigner/form/" version="1" bind-to-class="TemperatureConverterGUI">
3   <grid id="27dc6" binding="panelMain" layout-manager="GridLayoutManager" row-count="5" column-count="3" same-
   size-horizontally="false" same-size-vertically="false" hgap="-1" vgap="-1">
4     <margin top="20" left="20" bottom="20" right="20"/>
5     <constraints>
6       <xy x="20" y="20" width="553" height="400"/>
7     </constraints>
8     <properties/>
9     <border type="none"/>
10    <children>
11      <vspacer id="e0f26">
12        <constraints>
13          <grid row="0" column="0" row-span="1" col-span="3" vsize-policy="6" hsize-policy="1" anchor="0" fill
            ="2" indent="0" use-parent-layout="false"/>
14        </constraints>
15      </vspacer>
16      <vspacer id="addfa">
17        <constraints>
18          <grid row="3" column="0" row-span="1" col-span="3" vsize-policy="6" hsize-policy="1" anchor="0" fill
            ="2" indent="0" use-parent-layout="false"/>
19        </constraints>
20      </vspacer>
21      <component id="7aba8" class="javax.swing.JButton" binding="ButtonConvertTemperature">
22        <constraints>
23          <grid row="4" column="0" row-span="1" col-span="3" vsize-policy="0" hsize-policy="3" anchor="0" fill
            ="1" indent="0" use-parent-layout="false"/>
24        </constraints>
25        <properties>
26          <font size="15"/>
27          <text value="Convert Temperature"/>
28        </properties>
29      </component>
30      <component id="17fcc" class="javax.swing.JComboBox" binding="ComboBoxTemperatureConvertType">
31        <constraints>
32          <grid row="2" column="2" row-span="1" col-span="1" vsize-policy="0" hsize-policy="2" anchor="8" fill
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32 ="1" indent="0" use-parent-layout="false"/>
33     </constraints>
34     <properties>
35         <font size="15"/>
36     </properties>
37 </component>
38 <component id="3b6e3" class="javax.swing.JLabel">
39     <constraints>
40         <grid row="2" column="0" row-span="1" col-span="2" vsize-policy="0" hsize-policy="0" anchor="8" fill
41 ="0" indent="0" use-parent-layout="false"/>
42     </constraints>
43     <properties>
44         <font size="15"/>
45         <text value="Which temperature do we convert ?"/>
46     </properties>
47 </component>
48 <component id="ea3e0" class="javax.swing.JLabel">
49     <constraints>
50         <grid row="1" column="0" row-span="1" col-span="1" vsize-policy="0" hsize-policy="0" anchor="8" fill
51 ="0" indent="0" use-parent-layout="false"/>
52     </constraints>
53     <properties>
54         <font size="15"/>
55         <text value="Temperature"/>
56     </properties>
57 </component>
58 <component id="9e378" class="javax.swing.JTextField" binding="TextFieldTemperature">
59     <constraints>
60         <grid row="1" column="2" row-span="1" col-span="1" vsize-policy="0" hsize-policy="6" anchor="8" fill
61 ="1" indent="0" use-parent-layout="false">
62         <preferred-size width="150" height="-1"/>
63     </grid>
64 </constraints>
65     <properties>
66         <font size="15"/>
67     </properties>

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65     </component>
66   </children>
67 </grid>
68 </form>
69
```

```
1 import javax.swing.*;
2 import java.awt.*;
3 import java.awt.event.ActionEvent;
4 import java.awt.event.ActionListener;
5
6 public class TemperatureConverterGUI extends JFrame{
7     private JPanel panelMain;
8     private JButton ButtonConvertTemperature;
9     private JComboBox ComboBoxTemperatureConvertType;
10    private JTextField TextFieldTemperature;
11
12    public TemperatureConverterGUI() {
13        this.add(panelMain);
14        this.setSize(500,500);
15        this.setTitle("Temperature Converter Homework");
16        this.setDefaultCloseOperation(EXIT_ON_CLOSE);
17
18        ButtonConvertTemperature.addActionListener(e -> {
19            ConvertTemperature();
20        });
21
22        String[] convertTypes = {"C -> F" , "F -> C"};
23
24        ComboBoxModel convertTypeModel = new DefaultComboBoxModel(convertTypes);
25        ComboBoxTemperatureConvertType.setModel(convertTypeModel);
26    }
27
28    public void ConvertTemperature(){
29        double temperature = Double.parseDouble(TextFieldTemperature.getText());
30        String convertType = ComboBoxTemperatureConvertType.getSelectedItem().toString();
31
32        switch (convertType){
33            case("C -> F"):
34                temperature = temperature * (1.8) + 32;
35                break;
36            case("F -> C"):
```

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37         temperature = ((temperature - 32) * 5) / 9;
38         break;
39     }
40
41     String result = "Converted Type : " + convertType + "\n" + "Result : " + temperature;
42
43     JOptionPane.showMessageDialog(panelMain,result);
44 }
45
46 public static void main(String[] args){
47
48     //Set Windows's Component To Your Project
49     try {
50         UIManager.setLookAndFeel(UIManager.getSystemLookAndFeelClassName());
51     } catch (ClassNotFoundException e) {
52         e.printStackTrace();
53     } catch (InstantiationException e) {
54         e.printStackTrace();
55     } catch (IllegalAccessException e) {
56         e.printStackTrace();
57     } catch (UnsupportedLookAndFeelException e) {
58         e.printStackTrace();
59     }
60
61
62     //Set UI Thread to another thread
63     SwingUtilities.invokeLater(() -> {
64         TemperatureConverterGUI gui = new TemperatureConverterGUI();
65         gui.setVisible(true);
66     });
67
68 }
69 }
70
71
```

Temperature

Which temperature do we convert ?



Message



Converted Type : C -> F
Result : 86.0

OK

Convert Temperature