

Temperature Converter GUI

Write a GUI program, using the NetBeans GUI generator, that will convert temperatures from fahrenheit to celsius and from celsius to fahrenheit. The user should be able to enter a temperature to convert, click on a radio button to specify which conversion to do, and then click on a button to see the converted temperature displayed.

Use the following formulas for the temperature conversions:

$$F = 9 / 5 * C + 32$$

and

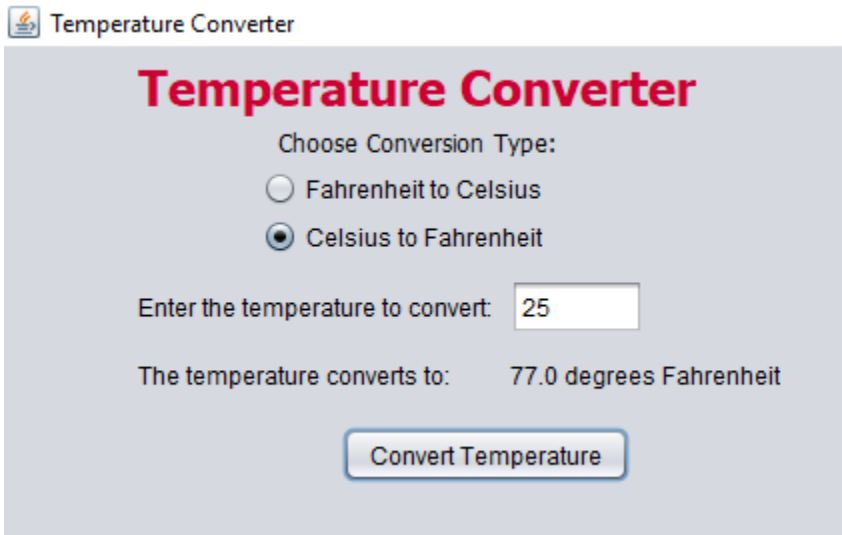
$$C = 5 / 9 * (F - 32)$$

where F is the fahrenheit temperature and C is the celsius temperature.

The temperatures should be displayed to 1 decimal place, e.g. 93.7 degrees Fahrenheit.

Note: Submit the assignment as a zip file of your NetBeans project folder. Zip the entire folder not just the .java files.

Example execution:



The screenshot shows a Java Swing window titled "Temperature Converter". The window has a light gray background. At the top, the title "Temperature Converter" is displayed in a large, bold, red font. Below the title, the text "Choose Conversion Type:" is centered. Underneath, there are two radio buttons. The first radio button is unselected and is followed by the text "Fahrenheit to Celsius". The second radio button is selected (indicated by a black dot in the center) and is followed by the text "Celsius to Fahrenheit". Below the radio buttons, there is a text label "Enter the temperature to convert:" followed by a text input field containing the number "25". Below the input field, there is a text label "The temperature converts to:" followed by the text "77.0 degrees Fahrenheit". At the bottom center of the window, there is a button with the text "Convert Temperature".