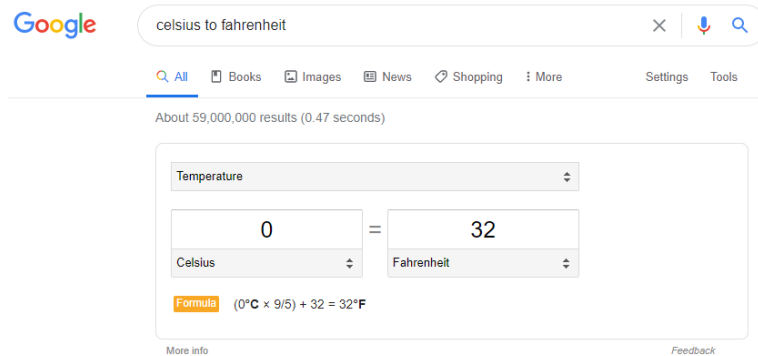


## Create a Celsius to Fahrenheit Converter

Create a simple Java application that calculates Fahrenheit from a Celsius temperature. A quick Google search will give you the formula and a calculator to verify the results of your program.



The image shows a Google search result for 'celsius to fahrenheit'. The search bar contains the text 'celsius to fahrenheit'. Below the search bar, there are links for 'All', 'Books', 'Images', 'News', 'Shopping', and 'More'. The search results show 'About 59,000,000 results (0.47 seconds)'. A temperature converter widget is displayed, showing '0' in the Celsius input field and '32' in the Fahrenheit output field. The formula '(0°C × 9/5) + 32 = 32°F' is shown below the fields. There are 'More info' and 'Feedback' links at the bottom of the widget.

$$(\text{degreesCelsius} * 9/5) + 32 = \text{degreesFahrenheit}$$

The application should prompt the user for a Celsius value using a *Scanner* object and the method *nextDouble()* to assign the user input to a variable of type double. Create another double variable to hold and display the Fahrenheit value. Make a user-friendly input and output dialog, formatted like the examples below. Creating mathematical expressions and using the Scanner class is covered in Liang, Chapter 2. Please start your application with the custom welcome message, with the appropriate changes, that you created in Lab 2. Make sure your code has the required documentation, as outlined in the CS Java Documentation Policy under Course Info on D2L.

```
Enter a degree in Celsius: 0
Celsius 0.0 is 32.0 in Fahrenheit
```

Figure 1 - Freezing point of water

```
Enter a degree in Celsius: 100
Celsius 100.0 is 212.0 in Fahrenheit
```

Figure 2 - Boiling point of water

```
Enter a degree in Celsius: 430
Celsius 430.0 is 806.0 in Fahrenheit
```

Figure 3 - Temperature on Mercury during the day

## Deliverables

Make sure your code has the required file header and correctly formatted identifier names, as outlined in the CS Java Documentation Policy under Course Info on D2L.

To receive credit for this lab you must

1. Demonstrate the code and execution to the instructor during this lab, during office hours, or during the next lab period.
2. Zip the src folder in your project directory and upload the instructor approved .java files to the Lab 5 D2L drop box.