

King Saud University  
College of Computer & Information Science  
CSC111 – Lab02  
IO, Variables, Expressions  
All Sections

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### Lab Exercise 1

Write a program that reads a Celsius degree in a double value from the console, then converts it to Fahrenheit and displays the result. The formula for the conversion is as follows:

$$\text{fahrenheit} = (9 / 5) * \text{celsius} + 32$$

**Hint:** In Java,  $9 / 5$  is 1, but  $9.0 / 5$  is 1.8.

Here is a sample run:

```
Enter a temperature in Celsius: 43 ↵  
43.0 Celsius is 109.4 Fahrenheit
```

### Lab Exercise 2

Write a program that reads the subtotal and the gratuity rate, then computes the gratuity and total. For example, if the user enters 10 for subtotal and 15% for gratuity rate, the program displays \$1.5 as gratuity and \$11.5 as total.

Here is a sample run:

```
Enter subtotal and gratuity rate: 10 15 ↵  
The gratuity is $1.5 total is $11.5
```