

Create a program that will ask the user for two sets of numbers. The first set should be integers and the second set should be real (decimal) numbers. The numbers provided below are examples only. When your program is running, the user can enter any numbers they wish.

For each set of numbers, you will perform the four basic arithmetic operations (add, subtract, multiply, divide) and output the result in a nicely formatted way.

The output of your program should look exactly like the following (user input is in **bold**). The **highlighted parts (in yellow)** are optional for ICS3C students, and required for ICS3U students. The **highlighted parts (in green)** are related to user input, and will change each time you run the program.

Please enter two numbers for integer arithmetic:

Value 1: **26**
Value 2: **12**

To confirm, you entered the following:

Value 1 = **26**
Value 2 = **12**

Addition: **26 + 12 = 38**
Subtraction: **26 - 12 = 14**
Multiplication: **26 * 12 = 312**
Division: **26 / 12 = 2**
As a fraction: 26 / 12 = 2 and 2 / 12

Please enter two numbers for real (decimal) arithmetic:

Value 3: **26.3**
Value 4: **12.7**

To confirm, you entered the following:

Value 3 = **26.3**
Value 4 = **12.7**

Addition: **26.3 + 12.7 = 39.0**
Subtraction: **26.3 - 12.7 = 13.6**
Multiplication: **26.3 * 12.7 = 334.01**
Division: **26.3 / 12.7 = 2.0708661417**
Square Root of 26.3 = 5.128352561983
Square Root of 12.7 = 3.563705936241
The value 26.3 rounded is 26
The value 12.7 rounded is 13

Program complete!