

Part 1: Variables, Decisions, and I/O

1. Write a program that will be called "Is It Cold In Canada Today?"
2. Ask a Canadian what is the threshold for cold
3. Receive the threshold in C0 (input)
4. See the current temperature in Fahrenheit
5. Receive the today's temperature in F0 (input)
6. Making the necessary conversions, decide
7. Print if is it cold for a Canadian (output)

Go to IDLE and try to program it

Save your program in a .py file and submit it in the Module 1 Worksheet assignment link

Part 2: Functions and parameters

Create a function zigzag that gets three values as input parameters, let's call them a, b, and c

The program will return True if they are a zigzag, and False otherwise, these numbers are a zigzag if, and only if $a < b > c$ or $a > b < c$

For example:

If a = 3 b = 8 c = 5 then they are a zigzag

If a = 3 b = 8 c = 9 then they are not a zigzag

If a = 6 b = 3 c = 6 then they are a zigzag

If a = 3 b = 5 c = 5 then they are not a zigzag

Go to IDLE and try to program it

Save your program in a .py file and submit it in the Module 1 Worksheet assignment link

Part 3: Loops

1. Create a program that swaps elements in a created vector
2. Ask the user an even integer between 9 and 21
3. Create a vector sized by this inputted integer
4. [0, 1, 2, ...]
5. Swap the first with the second element,
6. Swap the third with the fourth, ... and so on
7. Prints out the resulting vector

Go to IDLE and try to program it

Save your program in a .py file and submit it in the Module 1 Worksheet assignment link