# COMP200 - Assignment 1

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<https://trevorwoodman.ca/uni/comp200-assignment-1>

# Chapter 2 - Exercise 25

## Algorithm (Pseudocode)

1. Start algorithm
2. Given a sequence of values that must be greater than 0, processed one at a time (V):
3. Set result (R) to NO;
4. Set last passed value (L) to 0 (Zero);
5. While V does not equal -1:
   1. Get input (V)
   2. If V is equal to L, set R to YES
   3. Set L to V
6. Output R
7. End algorithm

## Algorithm (interactive)

For an interactive version, see file TrevorWoodman\_A1-C2-E25.py or visit <https://trevorwoodman.ca/uni/comp200-assignment-1>

# Chapter 3 - Exercise 14

## Algorithm (Pseudocode)

Given size (n):

Algorithm A executes 0.003\*(n^2) instructions.

Algorithm B executes 243\*n instructions.

1. Start algorithm
2. Given a value (n)
3. Set A to 0
4. Set B to 0
5. Set N to 1
6. While A <= B:
   1. Set A to 0.003\*(n^2)
   2. Set B to 243\*n
   3. Set n to equal itself plus 1
7. Output "Algorithm B became more efficient at approximately(B) instructions, size (N)"

## Algorithm (Interactive)

For an interactive version, see attached (TrevorWoodman\_A1-C3-E14.py or visit <https://trevorwoodman.ca/uni/comp200-assignment-1>