

COMP1020 Winter 2024

In Class Participation Week 1 Tuesday

Q1) Determine which of the following are **valid variable names**.

If invalid, explain why.

[1M]

- a) list1
- b) \$interest
- c) phone-and-email
- d) SNo.
- e) mobileNumber
- f) country_city
- g) num/30
- h) double

Q2) Determine the **data type** for the following numerical values.

[1M]

- a) 0.47
- b) 3456789234354545465343
- c) 32,822
- d) 84312345
- e) 0011
- f) 4.3E12 +4.3e12
- g) 0.7E-3
- h) 0x000f

Q3) Determine which of the following are valid string constants. [1M]

- a) '8:45 A.M.'
- b) "1.4E-12"
- c) "Red light - Green light"
- d) "Forks market, 130 - 123 Main Street, Winnipeg, MB R3C 1A3"
- e) "Weight:"
- f) "Never trust anything that can think for itself if you can't see where it keeps its brain!" - Arthur Weasley, Harry Potter and the Chamber of Secrets."

Q4) Write a program to calculate the **area** and **circumference** of a circle with a diameter of 6 (Declare a constant PI as 3.14 and the data type is float).

Write comments to explain your code. [1M]

Q5) Write a program to **swap** two numbers **without using** a temporary variable.

(Hint: use + and - operators). [1M]

Input: a=5

b=6

Output: a=6

b=5