

# Introduction to Computer Science and Programming 1 CSCI120

#### **Sample Midterm**

<u>Note</u>: This document has been designed and developed as part of an initiative for creating an OER (Open Education Resource) package for the course CSCI 120 at Columbia College.

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Last Modified: July 2022

#### Problem1

- Write a Python program which asks the user to enter a password and checks if the password is valid or not. A valid password:
  - o contains only alphabets (letters)
  - o has at least 6 characters
  - o is combination of upper-case and lower-case letters.

#### Problem2

- Write a program which asks the user to enter a temperature value in Celsius and base on the following rules generates some outputs:
  - o If the temperature greater than 35 degree: then prints: "It is to too warm, stay home"
  - o If the temperature is greater than 30 but less than 35, then prints: "It is really a summer day"
  - o If the temperature is between 20 and 30 degree, then prints: "Good weather out there"
  - o If the temperature between 10 and 20, there print: "Nice weather to go for running
  - Otherwise prints "It is a bit cold"

#### Problem3

- Write a Python program which prompts the user to enter 4 words. The program need calculate the total sum of the input words that are positive numbers.

### **Problem4**

- Write a Python program which asks the student to enter a work email address for Columbia College and checks whether the email address is valid or not. A valid Columbia College email address has the following pattern:
- [username]@columbiacollege.ca
- The username is the student id of the student and only contains digits.

## **Problem5**

- Write a Python program which asks the user to enter four names and counts the number of names which have an "ali" substring in them. The names are <u>not</u> case sensitive, meaning that if the user enters a name, for instance "Alison", "aliSon", "ALISON", "alison", … are considered the same and they all contain "ali" in them.

Good Luck <sup>©</sup>