# Introduction to Computer Science and Programming 1

# CSCI120

### Sample Midterm

**Note:** 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:
  + contains only alphabets (letters)
  + has at least 6 characters
  + 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:
  + If the temperature greater than 35 degree: then prints: “It is to too warm, stay home”
  + If the temperature is greater than 30 but less than 35, then prints: “It is really a summer day”
  + If the temperature is between 20 and 30 degree, then prints: “Good weather out there”
  + 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 not 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 ☺**