



Columbia College
Vancouver, Canada

Introduction to Computer Science and Programming 1
CSCI120

Assignment 3

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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Requirements

- For each of the problem below write a Python program.
- When defining variable names, use proper and meaningful names for the variables.
- Follow Python's convention for naming your variables (camel case)
- Remember Python is sensitive about indentation. Use proper indentation.
- Add comments to your code.
- Refer to lecture notes and lessons if you need any help.
- Write all the python programs in one single file. Separate your answers for each questions as following: Example:

```
##Problem 1  
print("Problem1-----")  
Python code for problem 1
```

```
##Problem 2  
print("Problem2-----")  
Python code for problem 2
```

Problem1

- Write a Python program which receives the user's age from the input and checks whether the user is able to take a Driver licence test and informs the user with a proper message. Note: Suppose, the user is eligible to take a Driver license test if s/he is greater than 18 years also.

Problem2

- Write a Python program which prompts (asks) the user to enter a number between 0 and 10. If the user entered a number that is less than 0 or greater than 10, the number is invalid. If the number is valid, then the program prints as many "Hello" word as the number the user had entered. For instance if the user entered 3 then the program should print Hello 3 times: Hello Hello Hello.

Problem3

- Write a Python program which asks the user to enter two numbers called number1 and number2 and then prints the number that is bigger. For instance if the user has entered 10 and 15, the program prints the bigger number that 15. Do not use the max function for this question. Use if-else to find the maximum of the 2 numbers.



Problem4

- Write a Python program which asks the user to enter a number, if the number is divisible by 6 and 7, the program prints “The number X is divisible by 6 and 7” and if the number is neither divisible by 6 nor by 7, then it prints “The number X is not divisible by 6 and 7”.

Problem5

- Write a Python program which asks the user to enter a number, if the number is divisible by 6 or 7, the program prints “The number X is divisible by 6 or 7” and if the number is neither divisible by 6 nor by 7, then it prints “The number X is not divisible by 6 and 7”.

Problem6

- Write a Python program which prompts(asks) the user to enter three numbers A and B and X and only if A is greater than B and less than X, then calculates and prints the result of the following math function otherwise prints 0.
 - o $A^X + X^B$
 - o ^ means exponent: 2^3 means $2*2*2 = 8$

Problem7

- Write a program which ask the user to enter a GPA (like 76) and checks for following letter grade based on the table below and prints the proper message:
 - o For instance if the user entered 70, then the program should print “You are Average (C+)”

A	86–100	Message: “Your are GREAT (A)”
B	73–85	Message: “Your are GOOD (B)”
C+	67-72	Message: “Your are AVERAGE (C+)”



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C	60–66	Message: “You need to practice more (C)”
C-	50–59	Message: “You need to try harder (C-)”
F (fail)	0–49	Message: “Unfortunately you failed (F)”

Good Luck ☺