

CMPSC-122: Intermediate Programming
Spring 2018

Homework 1

Due Date: 01/22/2018, 11:59 pm

Overview

This assignment contains several exercises that will help you refresh the basic Python concepts learned during your previous programming course. In the non-coding section, be as brief and clear as possible, long answers do not translate to more points.

IMPORTANT: Use Python 3 or superior version only. Submit your code to the Vocareum assignment HW1, otherwise you will not get credit.

Section 1. Non-coding exercises [10 points]

- a) Type $5 + 8 * 12$ at the Python prompt (interpreter) and hit enter. What value is returned by the Python interpreter? (2 points)
- b) Without using the interpreter, what do these expressions evaluate to? (4 points)
- $7 == 7$
 - $7 != 7$
 - $7 >= 9$
 - $\text{not } (7 < 9)$
- c) Complete this truth table: (4 points)

p	q	r	(not (p and q)) or r
F	F	F	
F	F	T	
F	T	F	
F	T	T	
T	F	F	
T	F	T	
T	T	F	
T	T	T	

Section 2. Coding exercises [90 points]

Exercise 1. Write the function `numDigits` that will take a number and **returns** the number of digits in that number. (30 points)

```
numDigits(556)

>> 3
```

Exercise 2. Assume the days of the week are numbered 0,1,2,3,4,5,6 from Sunday to Saturday. Write the function *dayName* which is given the day number and it **returns** the day name (a string). (30 points)

```
dayName(5)
>> Friday
```

Exercise 3. Write a function named *countEven* that takes a list and **returns** how many even numbers are in that list. (30 points)

```
test = [1,2,3,4,5]
countEven(test)
>> 2
```

Deliverables

- Submit your answers for both sections the Vocareum HW1 assignment. Read the “Submitting assignments to Vocareum” file for instructions in how to submit your script. (Posted on CANVAS)
- For the non-coding section, follow the instructions in the starter code and insert your answers into the *answers()* function