

# COMPUTER SCIENCE 101

## PYTHON PRACTICE QUESTIONS

Start getting prepared for the Python Exam with this document. Bring questions and confusions to class on **Wednesday, December 1<sup>st</sup>**. This is not a CSCI 101 homework assignment and doing these problems will not earn you extra credit. Doing these problems will, however, help you get ready for the Python exam!

### Example True/False Questions:

- \_\_\_\_\_ The expression `9 % 5` is equal to 4.
- \_\_\_\_\_ Variables are case sensitive, e.g., `var` is different than `Var`.
- \_\_\_\_\_ The concept of abstraction allows users of a function to ignore the details of the function implementation.
- \_\_\_\_\_ Underscores are allowed in variable names, but not at the beginning.
- \_\_\_\_\_ The condition `not (A and B)` evaluates to True if one or more of A and B is false.

### Example Fill in the Blank Questions:

The \_\_\_\_\_ statement will quit a loop, i.e., stop the loop from repeating further.

Consider the function definition: `def create_user(name, age)`

`name` and `age` are \_\_\_\_\_ of the function.

A while loop exits when its condition evaluates to \_\_\_\_\_.

### **Example Code Tracing Questions:**

Write the output of the following snippets of code OR write “error” if there is an error. Also, specify what the error is (if an error exists).

```
x = 'qwer'
    for i in range(len(x)+1):
        x = x + '!'
    print(x)
```

```
w = "mines.edu"
    for c in [0, 3, 2, 1]:
        print(c[w])
```

```
my_list = []
for i in range(8, 2, -2):
    my_list.append(i//2)
    i += 2
print(my_list)
```

## **Example Code Writing Questions:**

Suppose the following list is declared.

```
bigList = [ [1, 2, 3, 4, 5], [6, 7, 8, 9], [10, 11, 12]]
```

Write a single Python statement that will print the value 8 from `bigList`.

Implement the following pseudocode. You can assume the user provides correct input.

- While x is not 999
- ask user for input
- print sin(x)
- add x to list
- if x is the largest value in the list, print "WOW"

Write the definition for a function called `nPrint` which takes in the number of times to print (`n`) and the string to print (`value`), outputs `value` to the console `n` times, and then returns an increment of `n` (i.e., `n+1`).

Write a function called `list_stats` that, given a list of numbers, prints the minimum, maximum, and average of the numbers in the list.