CSC 2280

Introduction to Computer Science

Florida Southern College

**Lab 4**

**Friday, February 22, 2019**

The following exercises are intended to improve your understanding of computer science, and specifically Python programming, through guided practice. Follow the instructions carefully and make sure that requested input/output looks identical to the input/output of your code.

1. Given the following string,

s = "I'm sad we don't have class today, but happy we still have a lab"

What is the output of the following indexing and slicing operations?  
*HINT: See if you can predict what the result is before entering it in Python!*

1. s[1] – ‘
2. s[-1] - b
3. s[:] – I’m sad we don’t have class today, but happy we still have a lab
4. s[:7] + s[-20:] – I’m sad we still have a lab
5. s[0:4] + s[39:45] + s[8:33] – I’m happy we don’t have class today
6. s[45:] – we still have a lab
7. s[::2] - Imsdw o' aecastdy u ap esilhv a
8. s[32:27:-1] - yadot
9. s[-2::-7] – aasp end
10. s[::-1] - bal a evah llits ew yppah tub ,yadot ssalc evah t'nod ew das m'I
11. Given the following strings,

m = "yes"

n = "no"

What is the output of the following string expressions?  
*HINT: See if you can predict what the result is before entering it in Python!*

1. "Am I ready for the weekend? Heck " + m + "!"

Am I ready for the weekend? Heck Yes!

1. m \* 4

yesyesyesyes

1. (m[0] + n[1]) \* 2

yoo

1. n[:] + m[::-2]

nosy

1. (m.upper() + "!") \* 3

YES!YES!YES!

1. n.capitalize() + ", we do " + n + "t have class today"

No we do not have class today

1. Given the following strings,

a = "computer"

b = "science"

Write a Python expression using string operations that will generate the following results.

1. "Computer Science!"

print(a.capitalize() + **" "** + b.capitalize() + **"!"**)

1. "C.S."

a.capitalize()[0] + “.” + b.capitalize()[0]

1. "sci-fi"

B[:3] + “-fi”

1. "CSC2280"

print(a.capitalize()[0] + b.capitalize()[0] + a.capitalize()[0] + **"2280"**)

1. "I like computer science."

print(**"I like"** + **" "** + a[:] + **" "** + b[:])

1. "ecneics retupmoc"

print(b[::-1] + **" "** + a[::-1])

1. Given the following string,

message = "testing some string methods"

What is the output of the following string methods?  
*HINT: See if you can predict what the result is before entering it in Python!*

1. message.capitalize()

Testing some string methods

1. message.title()

Testing Some String Methods

1. message.center(33)

testing some string methods

1. message.count('s')

4

1. "! ".join(message.split())

testing! some! string! methods

1. message.replace("some", "all")

testing all string methods

1. message.find("t")

0

1. message.rfind("t")

22

1. message.upper()

TESTING SOME STRING METHODS

1. Write a Python script that asks the user for a string and then prints the string as an acronym. For example, if the user enters Florida Southern College, then your program should print FSC. Note that your acronym should be all capitalized even if the user did not enter the string that way; you only live once → YOLO.

**def** main():  
 string = input(print(**"Please input your string here: "**))  
  
 initials = **""  
 for** s **in** string.split():  
 initials = initials + s.capitalize()[0]  
  
 print(initials)  
  
main()