Week 08: Problem Set

Due: 2023-03-17 23:59:00

Description: Self Grade: 0 of 15 = 0.0%

You have marked this assignment Finished. Click to mark it In Progress

Questions

Not yet graded

11-9-1: What is printed by the following statements?

```
s = "python rocks"
print(s[1] * s.index("n"))
```

- **A. yyyyy**
- **B. 55555**
- **C. y5**
- **D. TypeError**

Check Me Compare me

✓ Correct! s[1] = y and the index of n is 5, so y * 5 prints 5 y characters.

Activity: 7.14.1 Multiple Choice (str-ex-mc-index)

Question in Context (/ns/books/published/cmsc-210-spring-2023/strings/Exercises.html#str-ex-mc-index)

Not yet graded

11-9-2: What will be printed when the following executes?

```
str = "His shirt is red"
pos = str.find("is")
print(pos)
```

- **A. 1**
- **B. 9**
- **C. 2**
- **D. pos**

Check Me Compare me

✓ Correct! The find function returns the index of the first position that contains the given string.

Activity: 7.14.2 Multiple Choice (str-ex-mc-red)

Question in Context (/ns/books/published/cmsc-210-spring-2023/strings/Exercises.html#str-ex-mc-red)

Not yet graded

11-9-3: What will be printed when the following executes?

```
str = "This is fun"
str = str[5]
print(str)
```

- (●) **A. i**
- ( ) **B. ' '**
- ( ) **C. is fun**
- ( ) **D. This is fun**

Check Me | Compare me

✓ Correct! This will print the character at position 5 in the string, which is i.

Activity: 7.14.3 Multiple Choice (str-ex-mc-end)

Question in Context (/ns/books/published/cmsc-210-spring-2023/strings/Exercises.html#str-ex-mc-end)

Not yet graded

11-9-4: What is the value of s1 after the following code executes?

```
s1 = "heY"
s1 = s1.capitalize()
s1.lower()
```

- ( ) **A. heY**
- ( ) **B. hey**
- ( ) **C. HEY**
- (●) **D. Hey**

Check Me | Compare me

✓ Correct! The capitalize method capitalizes the first letter of the word and lowercases the rest. Then, line 3 returns a new string without modifying the original.

Activity: 7.14.4 Multiple Choice (str-ex-mc-hey)

Question in Context (/ns/books/published/cmsc-210-spring-2023/strings/Exercises.html#str-ex-mc-hey)

Not yet graded

11-9-5: What would the following code print?

```
Mali = 5
print("Mali" + " is " + str(Mali))
```

- ( ) **A. Mali is Mali**
- (●) **B. Mali is 5**
- ( ) **C. 5 is Mali**
- ( ) **D. 5 is 5**

Check Me | Compare me

✓ Correct! The first Mali is in quotes, so it will print the string "Mali". The second Mali is not in quotes, so it will print the value of the variable Mali.

Activity: 7.14.5 Multiple Choice (str-ex-mc-name)

Question in Context (/ns/books/published/cmsc-210-spring-2023/strings/Exercises.html#str-ex-mc-name)

Not yet graded

11-9-6: What is printed by the following statements?

```
s = "python rocks"
print(s[3])
```

- ○ **A. t**
- ◉ **B. h**
- ○ **C. c**
- ○ **D. Error, you cannot use the [ ] operator with a string.**

Check Me | Compare me

✓ Correct! Indices start with 0.

Activity: 7.14.6 Multiple Choice (str-ex-mc-print)

Question in Context (/ns/books/published/cmsc-210-spring-2023/strings/Exercises.html#str-ex-mc-print)

Not yet graded

11-9-8: What is printed by the following statements?

```
s = "python rocks"
print(len(s))
```

- ○ **A. 11**
- ◉ **B. 12**
- ○ **C. 1**
- ○ **D. Error, missing quotes around s**

Check Me | Compare me

✓ Correct! len() returns the number of characters in the string, including spaces.

Activity: 7.14.8 Multiple Choice (str-ex-mc-len)

Question in Context (/ns/books/published/cmsc-210-spring-2023/strings/Exercises.html#str-ex-mc-len)

Not yet graded

11-9-7: What is printed by the following statements?

```
s = "python is awesome"
print(s[2] + s[-5])
```

- (•) **A. te**
- ( ) **B. tw**
- ( ) **C. o**
- ( ) **D. Error, you cannot use the [ ] operator with the + operator.**

Check Me | Compare me

✓ Correct! The indexing operator has precedence over concatenation.

Activity: 7.14.7 Multiple Choice (str-ex-mc-add)

Question in Context (/ns/books/published/cmsc-210-spring-2023/strings/Exercises.html#str-ex-mc-add)

Not yet graded

11-9-9: What is printed by the following statements:

```
s = "Rose"
s[1] = "i"
print(s)
```

- ( ) **A. Rose**
- ( ) **B. Rise**
- ( ) **C. s**
- (•) **D. TypeError**

Check Me | Compare me

✓ Correct! Strings are immutable, so you cannot change an existing string.

Activity: 7.14.9 Multiple Choice (str-ex-mc-rose)

Question in Context (/ns/books/published/cmsc-210-spring-2023/strings/Exercises.html#str-ex-mc-rose)

Not yet graded

11-9-10: What is printed by the following statements:

```
s = "ball"
r = ""
for item in s:
    r = item.upper() + r
print(r)
```

- ( ) **A. Ball**
- ( ) **B. BALL**
- (•) **C. LLAB**
- ( ) **D. TypeError**

Check Me | Compare me

✓ Correct! The order is reversed due to the order of the concatenation.

Activity: 7.14.10 Multiple Choice (str-ex-mc-ball)

Question in Context (/ns/books/published/cmsc-210-spring-2023/strings/Exercises.html#str-ex-mc-ball)

Not yet graded

Fix line 2 so that it prints “Hi” instead of “hi”.

Save & Run 1/1/2024, 10:42:00 PM - 8 of 8 Show in CodeLens

```
1 s2 = "hi"
2 print(s2)
3
4
```

```
hi
```

Result	Actual Value	Expected Value	Notes
ERROR	None	None	Error: name 's1' is not defined

You passed: 0.0% of the tests

Activity: 7.16.1 ActiveCode (str-ex-hiq)

Question in Context (/ns/books/published/cmsc-210-spring-2023/strings/WriteCode.html#str-ex-hiq)

Not yet graded

Fix the code so that only “meow” is printed.

Save & Run 1/1/2024, 10:40:18 PM - 3 of 3 Show in CodeLens

```
1 sentence = "The cat goes meow."
2 s2 = sentence[13:17]
3 print(s2)
4
5
6
```

```
meow
```

Result	Actual Value	Expected Value	Notes
Pass	'meow'	'meow'	

You passed: 100.0% of the tests

Activity: 7.16.3 ActiveCode (str-ex-meowq)

Question in Context (/ns/books/published/cmsc-210-spring-2023/strings/WriteCode.html#str-ex-meowq)

Not yet graded

Create a function named `count` that accepts a string and a letter as arguments, then returns the count of that letter in the string. For example, if the function call was `count("banana", "a")` it would return `3`. *Hint: use the* `count` *method.*

Save & Run

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Show in CodeLens

```
1 def count(input_string, letter):
2     return input_string.count(letter)
3 input_string = "banana"
4 target_letter = "a"
5 result = count(input_string, target_letter)
6
7 print(f"The count of '{target_letter}' in '{input_string}' is: {result}")
8
9
```

```
The count of 'a' in 'banana' is: 3
```

Result	Actual Value	Expected Value	Notes
Pass	3	3	Tested 'a' in 'banana'
Pass	0	0	Tested 's' in 'pineapple'
Pass	4	4	Tested 'p' in 'pepperoni pizza'
Pass	2	2	Tested 'r' in 'racecar'

You passed: 100.0% of the tests

Activity: 7.16.7 ActiveCode (str-ex-countq)

Question in Context (/ns/books/published/cmsc-210-spring-2023/strings/WriteCode.html#str-ex-countq)

Not yet graded

Take the following Python code that stores this string: `string = "X-DSPAM-Confidence: 0.8475"`. Use `find` and string slicing to extract the portion of the string after the colon character and then use the `float` function to convert the extracted string into a floating point number called `num`.

Save & Run

1/1/2024, 10:38:28 PM - 2 of 2

Show in CodeLens

```
1 string = "X-DSPAM-Confidence: 0.8475"
2
3
4 colon_position = string.find(':')
5
6
7 extracted_text = string[colon_position + 1:]
8 num = float(extracted_text.strip())
9 print(num)
10
11
12
```

```
0.8475
```

Result	Actual Value	Expected Value	Notes
Pass	0.8475	0.8475	

You passed: 100.0% of the tests

Activity: 7.16.5 ActiveCode (str-ex-floatq)

Question in Context (/ns/books/published/cmsc-210-spring-2023/strings/WriteCode.html#str-ex-floatq)

Not yet graded

Write a function `numDigits` that will return the number of digits in an integer `n`.

Save & Run

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Show in CodeLens

```
1 def numDigits(n):
2  return len(str(abs(n)))  # abs() is used to handle negative numbers
3 number = 12345
4 digits_count = numDigits(number)
5 print(f"The number of digits in {number} is: {digits_count}")
6
7
```

```
The number of digits in 12345 is: 5
```

Result	Actual Value	Expected Value	Notes
Pass	1	1	Tested numDigits on input of 2
Pass	2	2	Tested numDigits on input of 55
Pass	4	4	Tested numDigits on input of 1352
Pass	3	3	Tested numDigits on input of 444

You passed: 100.0% of the tests

Activity: 7.16.7 ActiveCode (str-ex-digitsq)

Question in Context (/ns/books/published/cmsc-210-spring-2023/strings/WriteCode.html#str-ex-digitsq)

You have marked this assignment Finished. Click to mark it In Progress

This assignment is graded and is no longer accepting submissions. You can still do the work, but it is up to your instructor whether they will accept it or not.