

Name: \_\_\_\_\_ Section: 1 2 3 4

1 = Mutchler, 1<sup>st</sup>-2<sup>nd</sup> periods. 2 = Mutchler, 3<sup>rd</sup>-4<sup>th</sup> periods. 3 = Anderson, 7<sup>th</sup>-8<sup>th</sup> periods. 4 = Anderson, 9<sup>th</sup>-10<sup>th</sup> periods.

Use this quiz to help make sure you understand the videos/reading. **Answer all questions.** Make additional notes as desired. **Not sure of an answer?** Ask your instructor to explain in class and revise as needed then.

Please print two-sided.

**Textbook Reading:** Section 2.4 – Strings (pages 48-54)

**Supplemental Reading:** String methods from Python.org, Strings from "How to Think Like a Computer Scientist: Learning with Python 3" See index page for links and descriptions.

1. In the ASCII subset of Unicode, what is the decimal value of the code for the question mark character, '?'  
Answer here \_\_\_\_\_

2. The **ord** function converts a \_\_\_\_\_ to a \_\_\_\_\_.

The **chr** function converts a \_\_\_\_\_ to a \_\_\_\_\_.

3. A backslash in a string begins an \_\_\_\_\_ sequence.

4. '\n' is the way we represent the \_\_\_\_\_ character in Python code.

5. Unicode attempts to encode \_\_\_\_\_.

6. The remainder of this quiz consists of Python code. **Beside each print statement, write what it prints.** **First, you should try to figure out** what each statement does (in many cases this will require info from the Supplemental Reading documents (linked from the main page for Session 17) or from Google searches.

**A major part of this problem is practice finding information that is not in your textbook.** Programmers spend a lot of time doing this kind of thing. If you are not sure of your answer, actually enter the code in Python. **If you are still not sure,** make a note (on this quiz is fine) so you can ask "why" in the Session 15 class.

**Note:** It will be tempting to "just get the answers" by simply typing the code in Python instead of first trying to figure it out yourself. **This quiz will be mostly worthless to you** if that is what you do.

```
import math
```

```
s1 = 'the mighty Nile river'
```

```
print(s1.lower())
```

```
print(s1.capitalize())
```

```
print(s1)

print(s1.title())

print(s1.replace('i', ''))

print(s1.count('i'))

print(s1.count('n'))

print(s1.lower().count('n'))

print(s1.endswith('ver'))

print(s1.find('mi'))

print(s1.find('hg'))

print(s1[4:10]) # this is called a slice

print(s1[-3:-1])

print(s1[1:12:3])

print(s1[12:1:-3])

print(s1[:3])

print(s1[11:])

s2 = s1[:]

print(s2 == s1)

word_list = s1.split(' ')
```

```
print(word_list)

print('!!!'.join(word_list))

s2 = 'abcd'

print(list(s2))

print('_'.join(list(s2)))

for c in s2:

    print(c, end=':')

print()

print(s2 < 'cde')

print(s2 < "Olin") # think ASCII

print(s2 < "Olin".lower())

print('a' in 'apple')

print('pl' in 'apple')

print('pa' in 'apple')

print('' in 'apple')

print('apple' in 'apple')

print([1, 2] == [1, 2]) # same contents?

print([1, 2] is [1, 2]) # same object?

print('abc' == 'abc')
```

```
print('abc' is 'abc')

print('*' + '  abc\n ' + '*')

print('*' + '  abc\n '.strip() + '*')

print('*' + s2.center(8) + '*')

print('*' + s2.ljust(8) + '*')

print('*' + s2.rjust(8) + '*')

s3 = '1\n23\n456\n7890'

print(s3)

print(s3.splitlines())

print(s3.splitlines()[2]) # are there quotes?

print ("The square root of {0} is {1}".format(7, math.sqrt(7)))

print ("The square root of {0} is {1:.3f}".format(7, math.sqrt(7)))

print ("The square root of {0} is {1:7.3f}".format(7, math.sqrt(7)))

print ("The square root of {} is {:7.3f}".format(7, math.sqrt(7)))

print ("The square root of {1} is {0:.3f}".format(math.sqrt(7), 7))
```