

Homework 8

Strings

TRUE/FALSE

1. You cannot use a **for** loop to iterate over the characters in a string.

ANS:

2. Indexing works with both strings and lists.

ANS:

3. In slicing, if the end index specifies a position beyond the end of the string, Python will use the length of the string instead.

ANS:

4. Indexing of a string starts at **1** so the index of the first character is **1**, the index of the second character is **2**, and so forth.

ANS:

5. The index **-1** identifies the last character of a string.

ANS:

6. The following expression is valid:

```
string[i] = 'i'
```

ANS:

7. The following code will display **'yes + no'**:

```
mystr = 'yes'  
yourstr = 'no'  
mystr += yourstr  
print(mystr)
```

ANS:

8. If the **+** operator is used on strings, it produces a string that is a combination of the two strings used as its operands.

ANS:

9. When accessing each character in a string, such as for copying purposes, you would typically use a **while** loop.

ANS:

10. If a whole paragraph is included in a single string, the `split()` method can be used to obtain a list of the sentences in the paragraph.

ANS:

11. The `strip()` method returns a copy of the string with all the leading whitespace characters removed but does not remove trailing whitespace characters.

ANS:

MULTIPLE CHOICE

1. What are the valid indexes for the string `'New York'`?
 - a. 0 through 7
 - b. 0 through 8
 - c. -1 through -8
 - d. -1 through 6

ANS:

2. What will be displayed after the following code executes?

```
mystr = 'yes'
yourstr = 'no'
mystr += yourstr * 2
print(mystr)
```

- a. `yes + no * 2`
- b. `yes + no yes + no`
- c. `yesnono`
- d. `yesnoyesno`

ANS:

3. What will be assigned to the variable `s_string` after the following code executes?

```
special = '1357 Country Ln.'
s_string = special[:4]
```

- a. `'7'`
- b. `'1357'`
- c. `5`
- d. `'7 Country Ln.'`

ANS:

4. What will be assigned to the variable `s_string` after the following code executes?

```
special = '1357 Country Ln.'
s_string = special[4:]
```

- a. `' Country Ln.'`

- b. '1357'
- c. 'Coun'
- d. '57 C'

ANS:

5. What will be assigned to the variable **s_string** after the following code executes?

```
special = '1357 Country Ln.'  
s_string = special[-3:]
```

- a. '135'
- b. '753'
- c. 'Ln.'
- d. 'y Ln'

ANS:

6. What will be assigned to the variable **some_nums** after the following code executes?

```
special = '0123456789'  
some_nums = special[0:10:2]
```

- a. '0123456789'
- b. '24682468'
- c. '02468'
- d. '02020202020202020202'

ANS:

7. If the start index is _____ the end index, the slicing expression will return an empty string.
- a. equal to
 - b. less than
 - c. greater than
 - d. less than or equal to

ANS:

8. What is the return value of the string method **rstrip()**?

- a. the string with all whitespaces removed
- b. the string with all leading whitespaces removed
- c. the string with all leading tabs removed
- d. the string with all leading spaces removed

ANS:

9. What is the first negative index in a string?

- a. 0
- b. -1
- c. -0
- d. the size of the string minus one

ANS:

10. What will be assigned to the string variable **pattern** after the following code executes?

```
i = 3
pattern = 'z' * (5 * i)
```

- a. 'zzzzzzzzzzzzzzzzzzzz'
- b. 'zzzzz'
- c. 'z * 15'
- d. Nothing; this code is invalid

ANS:

11. Which method would you use to determine whether a certain substring is present in a string?
- a. `endswith(substring)`
 - b. `find(substring)`
 - c. `replace(string, substring)`
 - d. `startswith(substring)`

ANS:

12. Which method would you use to determine whether a certain substring is the suffix of a string?
- a. `endswith(substring)`
 - b. `find(substring)`
 - c. `replace(string, substring)`
 - d. `startswith(substring)`

ANS:

13. What list will be referenced by the variable `list_strip` after the following code executes?

```
my_string = '03/07/2018'
list_strip = my_string.split('/')
```

- a. ['3', '7', '2018']
- b. ['03', '07', '2018']
- c. ['3', '/', '7', '/', '2018']
- d. ['03', '/', '07', '/', '2018']

ANS:

14. What will be the value of the variable `string` after the following code executes?

```
string = 'abcd'
string.upper()
```

- a. 'abcd'
- b. 'ABCD'
- c. 'Abcd'
- d. Nothing; this code is invalid

ANS:

15. What will be the value of the variable `string` after the following code executes?

```
string = 'Hello'
string += ' world!'
```

- a. 'Hello'
- b. ' world!'

- c. **'Hello world!'**
- d. Nothing; this code is invalid

ANS:

16. What will display after the following code executes?

```
password = 'ILOVEPYTHON'  
if password.isalpha():  
    print('Invalid, must contain one number.')elif password.isdigit():  
    print('Invalid, must have one non-numeric character.')elif password.isupper():  
    print('Invalid, cannot be all uppercase characters.')else:  
    print('Your password is secure!')
```

- a. Invalid, must contain one number.
- b. Invalid, must have one non-numeric character.
- c. Invalid, must contain one number.
Invalid, cannot be all uppercase characters.
- d. **Your password is secure!**

ANS:

COMPLETION

1. Each character in a string has a(n) _____ which specifies its position in the string.

ANS:

2. A(n) _____ exception will occur if you try to use an index that is out of range for a particular string.

ANS:

3. The **isalpha()** method returns _____ if the string contains only alphabetic characters and is at least one character in length.

ANS:

4. A(n) _____ is a span of characters that are taken from within a string.

ANS:

5. When the operand on the left side of the ***** symbol is a string and the operand on the right side is an integer, the ***** becomes the _____ operator.

ANS:

6. The third number in string slicing brackets represents the _____ value.

ANS:

7. The _____ operator can be used to determine whether one string is contained in another string.

ANS:

8. The _____ method returns **True** if the string contains only numeric digits.

ANS:

9. The _____ method returns the list of the words in a string.

ANS:

10. The _____ method returns a copy of the string with all the alphabetic letters converted to lower case.

ANS: