

## *Midterm Sample Questions*

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### *Sample Question 1 (Multiple Selection)*

Select all the true statements:

Choices:

Python is a strongly typed language.

It is possible for a string to have length 0

An immutable object cannot be modified.

Global variables cannot be accessed inside functions.

### *Sample Question 2 (Multiple Choice)*

What is the output of this code?

```
x = 5
k = 0
for i in range(x):
    for j in range(i):
        k += 1
print(x)
```

Choices:

0

5

10

25

*Sample Question 3 (Multiple Choice)*

Fill in the blank line with the proper choice so that the output value will be 7

```
x = 100  
k = 0
```

```
-----
```

```
        x = x // 2  
        k += 1  
print(k)
```

Choices

```
while x <= 7:  
    for x in range(10):  
        while x >= 1:  
            for i in range(100):
```

*Sample Question 4 (Short Answer)*

Why is it important to document our programs?

### *Sample Question 5 (Programming)*

Write a Python 3 function called **is\_reverse** as described below, and write test code for it suitable for running with pytest.

Your code must be formatted using proper indentation and according to the Style Guide, including docstrings. You only need to test valid function arguments (no need to use try-except). Include three testing cases.

**Parameters:**

two strings, `string_1`, `string_2`

**Specification:**

The function returns True only if

both strings are non-empty, and

`string_1` is the reversal of `string_2`

The function returns False otherwise.

**Examples:**

`is_reverse("", "")` returns False

`is_reverse("abc", "")` returns False

`is_reverse("abc", "bca")` returns False

`is_reverse("abc", "cba")` returns True

`is_reverse("a", "a")` returns True