

# Quiz 06

**Due** Oct 9, 2019 at 10pm**Points** 10**Questions** 5**Time Limit** None

## Instructions

Answer the following questions in your own words. Do NOT simply cut and paste the information from the slides. You will receive a score of 0 if you copy the prose from the slides.

## Attempt History

	Attempt	Time	Score
LATEST	<a href="#">Attempt 1</a>	18 minutes	9 out of 10

❗ Correct answers are hidden.

Score for this quiz: **9** out of 10

Submitted Oct 9, 2019 at 6:01pm

This attempt took 18 minutes.

### Question 1

**2 / 2 pts**

Describe the four types of Python containers. How are they different from each other?

Your Answer:

The four types of containers are Lists,Tuples,Dictionaryes,Sets.

lists are mutable values can be changed.

tuples are immutable values cannot be changed

Dictionaryes consists of key/value pair and they are mutable.

Sets are mutable and has unique values unlike lists

Lists are ordered and mutable with elements of any type.

Tuples are ordered, but not mutable with elements of any type.

Dicts map hashable keys to values. Dicts are mutable.

Sets contain distinct hashable values and are mutable.

## Question 2

1 / 2 pts

Explain the difference between `list.append()` and `list.extend()`. Include an example in your answer.

Your Answer:

`Append()`->inserts new value at the end of the list

`extend()`->It joins or concatenate list and sequence

`list.append(value)` appends the value a new element at the end of the list.

`list.extend(sequence)` concatenates list and the sequence.

yes, but you didn't include an example as specified in the question.

## Question 3

2 / 2 pts

Write a code fragment that shows how to emulate the behavior of `list.remove(value)` using only `list.pop()` and `list.index()`

Your Answer:

```
def remove(value):
```

```
    list.pop(list.index(value))
```

```
def my_remove(t, l):  
    if t in l:  
        l.pop(l.index(t))
```

Careful to check that the value is in the list because `list.index(value)` raises an exception if value is not in list

#### Question 4

2 / 2 pts

What is the difference between `sorted(list)` and `list.sort()`? Show examples of both.

Your Answer:

`sorted(list)` returns a new sorted list it does not change the actual list.

`list.sort()` return the same list with sorted values it changes the actual list

`sorted(list)` returns a sorted **copy** of the list

`list.sort()` sorts the list in place

Example from slides:

```
lst1 = [3, 1, 2]
sorted(lst1) returns a new list [1, 2, 3]. lst1 is not changed

lst1.sort() sorts lst1 in place, changing the list so
lst1 == [1, 2, 3]
```

yes, but you didn't include an example as specified in the question.

## Question 5

2 / 2 pts

Consider the code fragment:

```
x = [1, 2, 3]
y = [x, x]
x[0] = 4
```

What is the value of y? Why?

Your Answer:

value of y is :[[4, 2, 3], [4, 2, 3]]

because we are changing the value of `x[0]=4` and value of y is dynamic if we change the value of x the value of y will also change.

```
[[4, 2, 3], [4, 2, 3]]
```

Y consists of two instances of x so changing x also changes y.

Quiz Score: **9** out of 10