

assignment₆

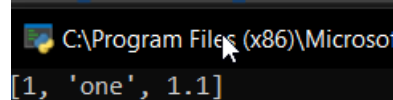
éidhne kennedy

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1 question 1

lists are an ordered collection of items, each located at a unique "index".

```
sample_list = [1, "one", 1.1]
print(sample_list)
```

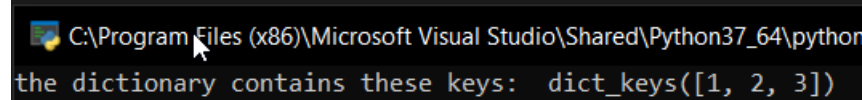


The screenshot shows a Windows command prompt window with the title bar "C:\Program Files (x86)\Microso...". The command prompt displays the output of the Python code: `[1, 'one', 1.1]`.

2 question 2

a dictionary is a collection of key-value pairs.

```
sample_dict = {1:"one", 2:"two", 3:"three"}
print("the dictionary contains these keys: ", sample_dict.keys())
```

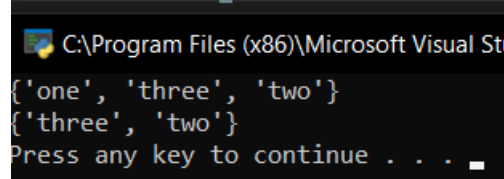


The screenshot shows a Windows command prompt window with the title bar "C:\Program Files (x86)\Microsoft Visual Studio\Shared\Python37_64\python...". The command prompt displays the output of the Python code: `the dictionary contains these keys: dict_keys([1, 2, 3])`.

3 question 3

a set is a collection of immutable elements that cannot be duplicated.

```
sample_set = {"one", "two", "three"}
print(sample_set)
sample_set.pop()
print(sample_set)
```

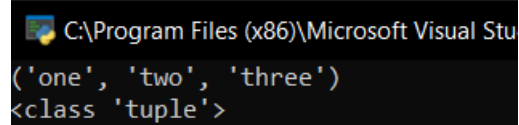


The screenshot shows a Windows command prompt window with the title bar "C:\Program Files (x86)\Microsoft Visual St...". The command prompt displays the output of the Python code: `{'one', 'three', 'two'}`, `{'three', 'two'}`, and `Press any key to continue . . .`.

4 question 4

tuples are an ordered collection of items, similar to lists, however, tuples are *immutable*.

```
sample_tuple = ("one", "two", "three")
print(sample_tuple)
print(type(sample_tuple))
```



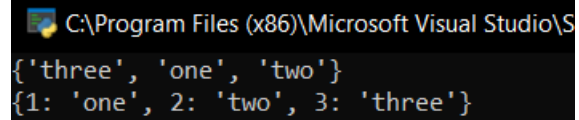
```
('one', 'two', 'three')
<class 'tuple'>
```

5 question 5

sets are immutable, have no keys, and cannot have duplicate elements.

dictionaries have key-value pairs, are mutable, and can have duplicate elements, but not duplicate keys.

```
sample_set = {"one", "two", "three"}
print(sample_set)
sample_dict = {1:"one", 2:"two", 3:"three"}
print(sample_dict)
```



```
{'three', 'one', 'two'}
{1: 'one', 2: 'two', 3: 'three'}
```