

# Congratulations! You passed!

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## Dictionaries

LATEST SUBMISSION GRADE

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1. Which of the following expressions corresponds to a dictionary with no elements?

1 / 1 point

☐ None

☐ []

☒ dict()

✓ Correct

☒ {}

✓ Correct

2. Given an existing dictionary `favorites`, what Python statement adds the key `"fruit"` to this dictionary with the corresponding value `"blackberry"`?

1 / 1 point

☐ `favorites = {"fruit": "blackberry"}`

☒ `favorites["fruit"] = "blackberry"`

☐ `favorites{"fruit": "blackberry"}`

☐ `favorites["fruit" = "blackberry"]`

☐ `favorites["fruit" : "blackberry"]`

✓ Correct

3. Which of the expressions below returns `True` when the dictionary `my_dictionary` contains the key `my_key` and `False` otherwise?

1 / 1 point


- ☐ `my_dictionary.has_key(my_key)`
- ☐ `my_dictionary` contains `my_key`
- ☐ `my_dictionary.my_key()`
- ☒ `my_key` in `my_dictionary`

 **Correct**


4. Keys in a dictionary can have which of the following types?

0 / 1 point


- ☒ string

 **Correct**  
Strings are immutable.


- ☒ tuple

 **Correct**  
Tuples are immutable. Use them in place of lists as keys.

- ☒ list

 **This should not be selected**  
List are mutable.

- ☒ int

 **Correct**  
Integers are immutable.

5. *Values* in a dictionary can have which of the following types?

1 / 1 point

- ☒ bool

 **Correct**

- ☒ dict



☒ tuple



Correct

☒ string



Correct

6. Consider the following dictionary:

1 / 1 point

```
1 instructor_ratings = {"Joe" : "awesome", "Scott" : "hmm..."}
```

What happens when Python evaluates the expression `instructor_ratings["John"]`?

- ☒ Since `"John"` is not a key in the dictionary, Python raises a `KeyError` exception.
- ☐ Since `"John"` is not a value in the dictionary, Python raises a `KeyError` exception.
- ☐ Python returns the value `None` since `"John"` is not a key in the dictionary.
- ☐ Since `"John"` is not a key in the dictionary, Python raises a syntax error.



Correct

7. Write a function `count_letters(word_list)` that takes as input a list of words that are composed entirely of lower case letters . This function should return the lower case letter that appears most frequently (total number of occurrences) in the words in `word_list`. (In the case of ties, return the earliest letter in alphabetical order.)

0 / 1 point

The Python code snippet below represents a start at implementing `count_letters` using a dictionary `letter_count` whose keys are the lower case letters and whose values are the corresponding number of occurrences of each letter in the strings in `word_list`.

```
1 def count_letters(word_list):
2     """ See question description """
3
4     ALPHABET = "abcdefghijklmnopqrstuvwxyz"
5
6     letter_count = {}
7     for letter in ALPHABET:
8         letter_count[letter] = 0
9
10    # enter code here
```

Complete your implementation of `count_letters` based on this snippet. As a test, `count_letters(["hello", "world"])` should return the letter `'l'` since `'l'` appears 3 times

When you are confident in your code, compute the lower case letter return by `count_letters(monty_words)` where `monty_words` is defined as shown.

```
1 monty_quote = "listen strange women lying in ponds distributing swords is no  
  basis for a system of government supreme executive power derives from a  
  mandate from the masses not from some farcical aquatic ceremony"  
2  
3 monty_words = monty_quote.split(" ")
```

Enter this **single letter** in the text box below. Do not include any spaces or enclosing quotes around the letter.

*No answer*