

Assignment 5

1. What does an empty dictionary's code look like?

Answer: Two curly brackets: {}

2. What is the value of a dictionary value with the key 'foo' and the value 42?

Answer:

```
In [1]: 1 {'foo':42}
Out[1]: (42,)
```

3. What is the most significant distinction between a dictionary and a list?

Answer: A list is an ordered sequence of objects, whereas dictionaries are unordered sets. However, the main difference is **that items in dictionaries are accessed via keys and not via their position.**

4. What happens if you try to access spam['foo'] if spam is {'bar': 100}?

Answer: If we try to access it, it's through a `keyError`

```
In [1]: 1 spam={'bar':100}

In [2]: 1 spam['foo']

-----
KeyError                                Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_7388\3999281786.py in <module>
----> 1 spam['foo']

KeyError: 'foo'
```

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5. If a dictionary is stored in spam, what is the difference between the expressions 'cat' in spam and 'cat' in spam.keys()?

Answer: There is no difference. The in operator checks whether a value exists as a key in the dictionary.

6. If a dictionary is stored in spam, what is the difference between the expressions 'cat' in spam and 'cat' in spam.values()?

Answer: 'cat' in spam checks whether there is a 'cat' key in the dictionary, while 'cat' in spam.values() checks whether there is a value 'cat' for one of the keys in spam.

7. What is a shortcut for the following code?

```
if 'color' not in spam:
```

```
    spam['color'] = 'black'
```

Answer: `if 'color' not in spam: spam['color'] = 'black'`

```
spam.setdefault('color', 'black')
```

8. How do you "pretty print" dictionary values using which module and function?

Answer: Within the pprint module there is a function with the same name pprint() , which is the function used to pretty-print the given string or object

```
pprint.pprint()
```