

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

Ans: `my_dict={}`

would assign an empty dictionary to variable `my_dict`

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

Ans: `my_dict={"foo":42}`

Key is "foo" and value is "42"

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

Ans: Dictionaries store data as key-value pairs and provide fast lookup based on keys. Lists store data as an ordered sequence and provide access based on numerical indices.

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

Ans: There will be a key error as there is no key as "foo".

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

Ans: 'cat' in `spam` checks for the presence of 'cat' as a key in the dictionary `spam`, while 'cat' in `spam.keys()` checks for the presence of 'cat' within the keys returned by `spam.keys()`. Most times they would return the same value. They do the same thing in a different ways.

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

Ans: "cat" in `spam` will return True if "cat" is present as a key in `spam` and False otherwise. "cat" in `spam.values()` would return true if "cat" is present as a value in the `spam` dictionary and false otherwise.

7. What is a shortcut for the following code?

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

Ans: `spam.setdefault("color","black")` would add the key value pair if not present in the dictionary. `setdefault()` allows us to do so.

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

Ans: module `pprint`  
function `pprint`

```
import pprint  
pprint.pprint(spam)
```