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

my\_dict = {}

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

my\_dict = {'foo' : 42}

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

List refers to the collection of index value pair. List is ordered, mutable, and allows duplicate values.

Dictionary refers to the hashed structure of key-value pair. dictionary is unordered, mutable and does not allow duplicate values with the same key.

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

We will get error. i.e."KeyError: 'foo'"

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

Both the expressions are same. Both the expressions check whether the value exists as a key in the dictionary or not.

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

'cat' in spam -> check whether the value exists as a key in the dictionary or not.

'cat' in spam.values() -> check whether the value exists as a value in the dictionary or not.

7. What is a shortcut for the following code?

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?

By using pprint module.

pprint.pprint(my\_dict)