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

Ans => a={}

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

Ans => {'foo': '42'}

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

Ans => Dictionary is consists of key value pair where we can access value from dictionary with key but in case of list there is no key we can access value from list by index number.

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

Ans => 100

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 means it is checking value cat in dictionary and cat in spam.keys() means it is trying to check cat as key.

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

Ans => repeated question.

7. What is a shortcut for the following code?

if 'color' not in spam:

spam['color'] = 'black'

Ans => spam['color'] = 'black' if 'color' not in spam else 'color'

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

Ans => from pprint import pprint and will use pprint function