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

It is represented by a pair of curly braces {} with no key-value pairs inside.

Eg

Empty\_dict = {}

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

dict = {‘foo’ : 42}

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

list stores values in ordered sequence that can be accessed by their index, while a dictionary stores values as key-value pairs that can be accessed by their keys.

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

We will get an Error because the key 'foo' does not exist in the dictionary spam.

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

No difference between the 'cat' in spam and 'cat' in spam.keys(), because both check whether the key ‘cat’ is present in the dictionary spam.

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 checks whether the key 'cat' is present in the dictionary spam . On the other hand, 'cat' in spam.values() returns True if 'cat' is one of the keys in spam, and otherwise return False.

7. What is a shortcut for the following code?

if 'color' not in spam:

spam['color'] = 'black'

1st method : using dictionary comprehension

spam = { ‘color’ : ‘black’ if 'color' not in spam else spam[‘color’]}

2nd method : by using setdefault() function , it checks whether a key is present in a dictionary , if it found not present , it return the specified return value.

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

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

To pretty print the dictionary values we can use pprint() function. pprint() prints each key-value pair in the dictionary on a separate line, and also indents values to make the output more readable. We can use pprint() on any dictionary by importing it from pprint module.