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

We can initialize an empty dictionary by using just curly brackets or using dict() function as below:

* + empty\_dictionary = {}
  + empty\_dictionary= dict()

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

If we have a dictionary spam={‘foo’:42}

The value would be **42** and the key would be foo.

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

**Lists:** Lists are similar to arrays but can store various data types such as integers, strings, and objects. Lists are also mutable, which means that we can alter the layout of the list after it has been established.

**Dictionary:** A dictionary is a hashed structure of key and value pairs that is an unordered set of data values.  As for each key dictionary only have one value. Dictionary data is stored in key-value pairs, with each pair separated by a colon and each element separated by a comma.

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

As the KEY ‘foo’ will not be available in the dictionary ‘spam’, the statement spam['foo'] will result in **KeyError**

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

When an iterator or logical search, such as ‘in,' is added to a dictionary, it is applied to the ‘KEYs' rather than the VALUEs. So, for the dictionary "spam," the terms "cat" in spam and "cat" in spam. keys() are equivalent. In the case of both expressions, if ‘cat' is present in any of the dictionary keys ‘spam', the expression will return True, otherwise False.

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

When an iterator or logical search, such as ‘in,' is added to a dictionary, it is applied to the ‘KEYs' rather than the VALUEs.

When the keyword.values() is used, the logical operation is performed on the values rather than the keys. As a result, ‘cat' in spam checks the keys, while ‘cat' in spam.values() checks the values.

7. What is a shortcut for the following code?

if 'color' not in spam:

spam['color'] = ‘black'

If we have to check for the presence of a key and add a key and value to the dictionary if the checked key is not already present then the above code would be the best way to do that. I couldn’t think of any other better way to do it.

Please provide your answer to enlighten me on this.

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

'**pprint**' is the module used for pretty print. '**PrettyPrinter**' is the function used to make pretty print.

E.g:

import pprint  
pp = pprint.PrettyPrinter(indent=1, compact=True)

pp.pprint(spam)