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

empty\_dict = {}

Or empty\_dict = dict()

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

my\_dict = {'foo':42}

value = my\_dict['foo']

print(value)

#o/p: 42

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

**- Lists:** are ordered collection of element, where elements are accessed with indexes

**- dictionaries:** unordered collection of element, where elements are accessed using keys.

Accessing element in dictionaries in more efficient than lists. Hence dictionaries are more suitable where fast access to elements are required.

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

- it will throw keyError

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

In terms of functionality, both expression will give same output, indicating whether ‘cat’ exits in spam. However, spam.keys(), which returns a view object representing the dictionary keys before performing the membership check.

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

1. ‘cat’ in spam: checks if cat is present across keys of dictionary spam

2. ‘cat’ in spam.values(): checks if cat is present across values in dictionary spam

**7. What is a shortcut for the following code?**

if 'color' not in spam:

spam['color'] = ‘black'

Ans: spam.setdefault(‘color’,’black’)

This will set default color value to black in dictionary, if color key is not present.

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

Pprint module is used and pprint() function from this module is used to convert dictionary in readable manner.

import pprint

my\_dict = {'key1': 'value1', 'key2': 'value2', 'key3': 'value3'}

pprint.pprint(my\_dict)