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

Answer 1: Let’s save the empty dictionary in a variable. Required code is: empty\_dict = {}. Empty dictionary in python is represented by a pair of curly braces.

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

Answer 2: It will look like: {‘foo’:42}

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

Answer 3: The most significant distinction between a dictionary and a list is that a dictionary is an unordered collection of key-value pairs, while a list is an ordered collection of elements.

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

Answer 4: It will give a key error as the key ‘foo’ does not exists in the dictionary.

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

Answer 5: If a dictionary is stored in spam, the expression 'cat' in spam checks if the key 'cat' exists in the dictionary. On the other hand, the expression 'cat' in spam.keys() also checks if the key 'cat' exists in the dictionary. The two expressions are functionally equivalent.

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

Answer 6: If a dictionary is stored in spam, the expression 'cat' in spam checks if there is any value 'cat' in the dictionary, regardless of which key it is associated with. The expression 'cat' in spam.values() checks if 'cat' is a value associated with any key in the dictionary.

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

**if 'color' not in spam:**

**spam['color'] = 'black'**

Answer 7: The shortcut for the given code is to use the setdefault() method. Code is: spam.setdefault('color', 'black')

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

Answer 8: To "pretty print" dictionary values, you can use the pprint module and its pprint() function. Here's an example:

from pprint import pprint

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

pprint(my\_dict)