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

Ans: We can create empty dictionary using the given code:

Method1: dict1 = {}

Method2: dict()

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

Ans: dict1 = {‘foo’: 42}

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

Ans:

|  |  |
| --- | --- |
| **Dictionary** | **List** |
| Dictionary is a collection containing elements in the form of key: value pair | A List is a sequence containing objects of different or same data types. |
| Dictionary is a mutable object. | List is a mutable object. |
| Dictionary are unordered sets. | Lists are ordered sequences i.e. the order in which we input an item is the same in which we get an item out of lists. |
| We can access an element from dictionary based on keys. | We can access an element from list based on its index which is an integer |

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

Ans. We get a runtime error called KeyError. It means that key ‘foo’ is not available 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()?

spam = {‘cat’: 100}

Ans. Both the expressions ‘cat’ in spam and ‘cat’ in spam.keys() return True. The in operatory checks for the presence of the key ‘cat’ in 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()?

spam = {‘cat’ : 100}

Ans. ‘cat’ in spam will return True as the key ‘cat’ is present in dictionary spam

‘cat’ in spam.values() will return False as the value ‘cat’ is not present in the dictionary

7. What is a shortcut for the following code?

if 'color' not in spam:

spam['color'] = 'black'

Ans. We use the setdefault() method of the dictionary. It checks if the value of the specified key exists. If it does not exist then insert the key with the given value.

dictionary.setdefault(‘color’ , ‘black)

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

Ans. We can use the pprint() function of the pprint module. The pprint() function prints the output in more readable format.