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

**Solution1:-**

dict={}

type(dict)

output:dict

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

**Solution2:-**

foo is the key and 42 is the value.

{“foo”:42}

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

**Solution3:-**

List is a sequence of multiple type of objects and can be denoted by [] like lst=[1,2,3.89,”karan”,2+5j]

And dictionary is a set of key-value pair like dict={“foo”:42,”key1”:”king”}.

Also in a list, to access an element, index of the element is used whereas in a dictionary key is used to access an element.

lst[0]

output:1

dict[“foo”]

output:42

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

**Solution4:-**

spam={'bar': 100}

spam["foo"]

output:

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KeyError Traceback (most recent call last)

<ipython-input-4-1d6119482ba8> in <module>

1 spam={'bar': 100}

----> 2 spam["foo"]

KeyError: 'foo'

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

**Solution5:**

There is no difference. The in operator checks whether “cat” exists as a key in the dictionary or not. If “cat” is a key in the dictionary, then it will give True as output otherwise False as output.

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

**Solution6:-**

The expressions 'cat' in spam checks whether “cat” exists as a key in the dictionary or not. If “cat” is a key in the dictionary, then it will give True as output otherwise False as output.

And

'cat' in spam.values() checks whether “cat” exists as a value associated to any key in the dictionary or not. . If “cat” is a value in the dictionary, then it will give True as output otherwise False as output.

1. What is a shortcut for the following code ?

if 'color' not in spam:

spam['color'] = 'black'

**solution7:-**

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

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

**Solution8:-**

import pprint

pprint.pprint(spam)

output: {'bar': 100, 'color': 'black'}