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

**Ans:** An empty dictionary can be created using the following code:

dict1={}

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

**Ans:** The value with the key ‘foo’ in the dictionary is 41.

dict1={"foo":42}

value=dict1["foo"]

print(value)

Output of the following code is:

42

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

**Ans:** Following are the difference between a dictionary and a list:

* A dictionary is an unordered collection of key-value pairs, whereas a list is an ordered collection of various elements.
* Dictionary is created using curly braces {}, whereas list is created using square brackets [].
* Elements in a dictionary are accessed using unique keys instead of indices, whereas elements of a list are accessed using their indices.

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

Ans: It will encounter key error.

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KeyError Traceback (most recent call last)

<ipython-input-3-ea2a9c778d47> in <module>()

**1**

**2** spam = {'bar':100}

----> 3 spam['foo']

**4** #This will give us key error

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()?

Ans: There is no difference. The ‘cat’ in operator checks whether ‘cat’ exists as a key in the dictionary spam or not. While 'cat' in spam.keys() checks whether there is a value for 'cat' for one of the keys in spam or not.

spam = {"cat":50}

"cat" in spam

Output of the above code is True

spam = {"cat":50}

'cat' in spam.keys()

Output of the above code is True

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

Ans:

‘cat’ in spam operator checks whether ‘cat’ exists as a key in the dictionary spam or not.

‘cat’ in spam.values()

‘cat’ in spam.values() operator checks whether ‘cat’ exists as a value in the dictionary spam or not.

For example:

spam = {"cat":50}

"cat" in spam

Output: True

spam = {"cat":50}

"cat" in spam.values()

Output: False

1. What is a shortcut for the following code?

if 'color' not in spam:

spam['color'] = 'black'

Ans:

spam ={'Bus':125}

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

spam

Output: {'Bus': 125, 'color': 'black'}

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

Ans:

import pprint

dict1= [{'Name': 'Arnav', 'Math': '95', 'Science': '90'},

        {'Name': 'Binod', 'Math': '98', 'Science': '89'},

        {'Name': 'Anwesha', 'Math': '97', 'Science': '84'}]

pprint.pprint(dict1)

Output of the above code is:

[{'Math': '95', 'Name': 'Arnav', 'Science': '90'},

{'Math': '98', 'Name': 'Binod', 'Science': '89'},

{'Math': '97', 'Name': 'Anwesha', 'Science': '84'}]