**Python Assignment - 5**

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

=> my\_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)

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

=> dictionaries provide a mapping between unique keys and their associated values, allowing fast access to values based on keys. Lists, on the other hand, are ordered collections where elements are accessed by their position in the sequence.

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

=> If you try to access spam['foo'] where spam is {'bar': 100}, you will encounter a KeyError. The KeyError is raised when you try to access a key that doesn't exist in a dictionary.

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

=> The expressions 'cat' in spam and 'cat' in spam.keys() are slightly different in their behavior:

1. 'cat' in spam: This expression checks whether the key 'cat' exists in the dictionary spam. It directly checks if the key is present among the keys of the dictionary.

2. 'cat' in spam.keys(): This expression also checks whether the key 'cat' exists in the dictionary spam. However, it explicitly calls the keys() method on spam to obtain a list of all the keys in the dictionary and then checks if 'cat' is present in that list.

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

=> The difference between the expressions ‘cat’ in spam and ‘cat’ in spam.values().

1. 'cat' in spam: This expression checks whether the string 'cat' exists as a key in the dictionary spam.

2. 'cat' in spam.values(): This expression checks whether the string 'cat' exists as a value in the dictionary spam. It determines if 'cat' is present among the values of the dictionary.

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

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

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

=> The shortcut for the given code is

spam.setdefault(‘color’, ‘black’)

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

=> The ‘pprint()’ function from the ‘pprint’ module provides a way to display complex data structures, such as dictionaries, with improved formatting. It presents the data in a more human-friendly and visually appealing manner.

Example:-

Import pprint

My\_dict = {‘ram’ : 1, ‘sham’ : 2, ‘karan’ : 3}

pprint.pprint(My\_dict)

output: {‘ram’ : 1,

‘sham’ : 2,

‘karan’ : 3}