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

Ans:- An empty dictionary is represented by a pair of curly braces{}

empty_dictionary={}

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

Ans:- Syntax will be:-

my_dict={"foo":42}

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

Ans:- There are following differences:-

a) A list is an ordered collection of items & a dictionary is an unordered collection of Key value Pair.
b) List do not require key for each value ,elements are stored solely based on their position within the list but dictionary require unique key for each value. Keys serve as identifier for the corresponding value.
c) A list is created by placing items inside the square bracket separated by commas & a dictionary created by placing key value pairs inside the curly braces separated by commas. Each items is a pair made up of Key & value ,separated by a colon.

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

Ans:- It will raise the KeyError because Key foo is not there in dictionary spam.

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

Ans:- Both expression check the existence of Key cat in dictionary spam.

' Cat' in spam- This is a direct check for the key in the dictionary.

'cat' in spam.keys()- using spam.keys() explicitly retrieves a view of keys before

performing the check.

6. 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:-** This expression is used to check for the existence of keys in the dictionary. It checks if the key 'cat' exists in the dictionary spam.

'cat' in spam.values(): This expression is used to check for the existence of values in the dictionary. The value() method return a view object represent in all the values in the dictionary. It checks if the 'cat' exists in that view of value.

7. What is a shortcut for the following code?

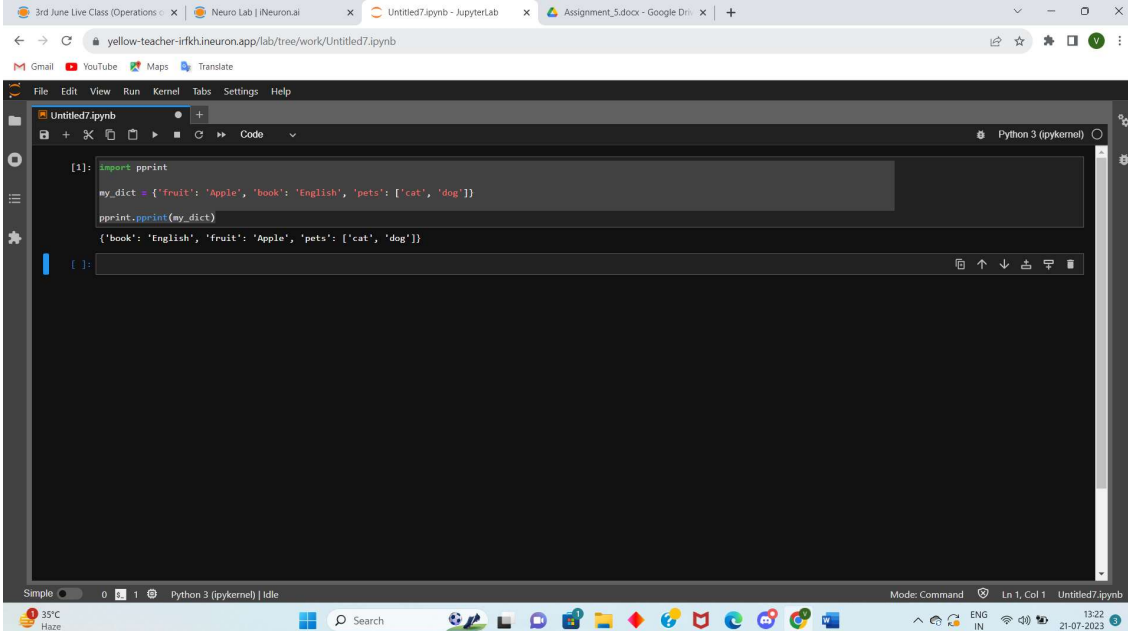if 'color' not in spam:

spam['color'] = 'black'

Ans:- We can use dict.setdefault() method .

Eg:- spam.setdefault('color','black')

setdefault() method allow us to set a default value for a key in a dictionary if the key does not exist.

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

Ans:- To "pretty print" dictionary values, we can use pprint module, which provides a pprint() function for this purpose.