Notebook- <https://colab.research.google.com/drive/1xP6DpFjLbYjuFDQVZOJwuw7CQ-SOFPn4?usp=sharing>

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

Ans- An empty dictionary can be defined using curly braces `{}`

dictionary={}

2. What is the value of a dictionary value with the key &#39;foo&#39; and the value 42?

Ans- If you have a dictionary with the key 'foo' and the value 42, you can access the value by using the key as an index in the dictionary.

```

my\_dic={'foo':42}

value=my\_dic['foo']

Value

```

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

Ans- A dictionary is an unordered collection of unique key-value pairs, accessed by keys rather than indexes. It uses a hash table for efficient retrieval. On the other hand, a list is an ordered collection of elements, accessed by numeric indexes. Lists allow duplicates and maintain insertion order. Both are mutable, allowing modifications.

4. What happens if you try to access spam[&#39;foo&#39;] if spam is {&#39;bar&#39;: 100}?

Ans- If we try to access spam['foo'] and spam is {'bar': 100}, you will encounter a KeyError

5. If a dictionary is stored in spam, what is the difference between the expressions &#39;cat&#39; in spam and

&#39;cat&#39; in spam.keys()?

Ans- The expression 'cat' in spam checks if the key 'cat' exists directly in the dictionary spam. It returns True if the key is present as a direct key in the dictionary.

On the other hand, the expression 'cat' in spam.keys() checks if 'cat' is one of the keys available in the list of keys obtained from spam.keys(). The keys() method returns a view object representing the dictionary's keys.

In most cases, both expressions yield the same result, as the membership tests are typically performed on dictionary keys.

6. If a dictionary is stored in spam, what is the difference between the expressions &#39;cat&#39; in spam and

&#39;cat&#39; in spam.values()?

Ans- The expression 'cat' in spam checks if the key 'cat' exists in the dictionary spam. It returns True if the key is present in the dictionary's keys. On the other hand, the expression 'cat' in spam.values() checks if the value 'cat' exists in any of the dictionary's values. It returns True if the value is found in any of the dictionary's values.

7. What is a shortcut for the following code?

if &#39;color&#39; not in spam:

spam[&#39;color&#39;] = &#39;black&#39;

Ans- Using setdefault() in dictinary

```

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

```

8. How do you &quot;pretty print&quot; dictionary values using which module and function?

Ans-

To "pretty print" dictionary values in Python, you can use the pprint module's pprint() function. The pprint module provides a way to print data structures, including dictionaries, in a more readable and formatted manner.

```

import pprint

my\_dict = {'key1': 'value1', 'key2': 'value2', 'key3': 'value3'}

pprint.pprint(my\_dict)

```