

Assignment 5

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

Ans. - empty dictionary code looks like as following

```
empty_dict = { }
```

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

Ans. - `my_dict = {'foo': 42}`

So, the value of the key 'foo' in this dictionary is 42.

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

Ans. - The most significant distinction between a dictionary and a list is how they store the elements

Dictionary Stores items as key-value pairs. Each item is accessed using a unique key.

Example: `{'name': 'Alice', 'age': 30}`

Stores items in an ordered sequence, where each item is accessed by its index.

Example: `['Alice', 30]`

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

Ans. - If you try to access `spam['foo']` when `spam` is `{'bar': 100}`, you'll get a `KeyError` because the key

'foo' does not exist in the 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. - **'cat' in spam:** Directly checks if 'cat' is a key in the dictionary `spam`.

'cat' in spam.keys(): Retrieves the view of keys from the dictionary using `spam.keys()` and then checks if 'cat' is in that view.

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: Directly checks if 'cat' is a key in the dictionary spam.

'cat' in spam.values(): Checks if 'cat' is one of the values in the dictionary spam.

It will return True if 'cat' is a value in any of the key-value pairs in spam and False otherwise.

7. What is a shortcut for the following code?

if 'color' not in spam:

spam['color'] = 'black'

Ans. - A shortcut for the above code is to use the dict.setdefault() method. This method sets

the value for the key 'color' only if the key does not already exist in the dictionary spam

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

This line of code will check if 'color' is a key in spam. If 'color' is not a key, it will set 'color' to 'black'. If 'color' is already a key, it will leave its current value unchanged.

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

Ans. - To "pretty print" dictionary values in Python, you can use the pprint module and its pprint() function.

eg. my_dict = {'name': "Rohan", 'age': 30, 'city': "Wonderland"}

pprint.pprint(my_dict)