

Assignment 5

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

Explanation:

In python, Empty dictionary looks like curly braces without any values.

Snippet:

```
my_dict = {}  
print(my_dict)
```

Output:

```
{}
```

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

Snippet:

```
my_dict = {'foo':42 }  
print(my_dict.values())
```

Output:

```
42
```

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

List	Dictionary
<ul style="list-style-type: none">Lists are ordered collection of items.	<ul style="list-style-type: none">Dictionaries are unordered collections till python 3.7 after that it is ordered collection of items.
<ul style="list-style-type: none">Elements in list can be accessed by index.	<ul style="list-style-type: none">Elements in a dictionary are accessed by their keys.
<ul style="list-style-type: none">Lists preserve insertion order.	<ul style="list-style-type: none">Dictionary does not preserve insertion order.
<ul style="list-style-type: none">My_list =[1,2,3,4,5]	<ul style="list-style-type: none">My_dict={'name':'surya','age':25}
<ul style="list-style-type: none">List can contain duplicate values.	<ul style="list-style-type: none">Dictionary contains unique values.

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

If try to access spam['foo'] if spam is {'bar': 100}. We will get `keyError`. This will occur error because spam[foo] key is not in the dictionary.

Snippet:

```
spam = {'bar':100}  
print(spam['foo'])
```

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

'cat' in spam

When dictionary stored in a variable 'spam' the expression 'cat' in spam will check for the existence of the key 'cat'.

Snippet:

```
spam = {"dog" : "jimmy" , "cat" : "timmy"}  
print('cat' in spam)
```

Output:

True

'cat' in spam.keys()

It will check only the keys whether 'cat' key is found or not.

Snippet:

print('cat' in spam.keys())

Output:

True

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

'cat' in spam

When dictionary stored in a variable 'spam' the expression 'cat' in spam will check for the existence of the key 'cat'.

Snippet:

spam = {"dog" : "jimmy" , "cat" : "timmy"}

print('cat' in spam)

Output:

True

'cat' in spam.values()

It will check only the values whether 'cat' key is found or not.

Snippet:

print('cat' in spam.values())

Output:

False

7. What is a shortcut for the following code?

if 'color' not in spam:

spam['color'] = 'black';

The shortcut for this code are:

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

The above code will check for existence of key color in the dictionary if the key exists it will return the corresponding value if key does not exist key-value pairs are added to the dictionary.

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

Snippet:

import pprint

pprint.pprint(spam)

Explanation:

Pprint module will provide a way to display the complex dictionaries into simpler format.

Pprint function will format the dictionary in an easier way.