

Assignment 5

1. What does an empty dictionary code look like?

Ans: An empty dictionary is often represented by two empty curly brackets `d = {}` or `d = dict()`

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

Ans: `{'foo':42}`

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

Ans: Dictionaries are represented by `{}` where as lists are represented by `[]`. Items in dictionary are in key value pair while list can store value as it is. The items stored in a dictionary are Unordered, earlier in python version 3.6, however, it is ordered as of version 3.7, while the items in a list are ordered.

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

Ans: we will get a `KeyError`: `KeyError: 'foo'`

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

Ans: There is no difference. The operator checks whether a value exists as a key in the dictionary or no

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` checks whether there is a `'cat'` key in the dictionary, while `'cat' in spam.values()` checks whether there is a value `'cat'` for one of the keys in `spam`.

7. what is a shortcut for the following code ? if `'color'` not in `spam`: `spam['color'] = 'black'`

Ans: `spam.setdefault('color','black')`

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

In Python, we can use the `pprint` module to "pretty print" dictionary values. The `pprint` module provides a `pprint()` function that formats the output in a more readable and organized way

```
In [30]: ndict = {
          0:{'Name': 'John', 'Age': '23', 'Residence': {'Country': 'USA', 'City': 'New York'}},
          1:{'Name': 'Jose', 'Age': '44', 'Residence': {'Country': 'India', 'City': 'Bangalore'}}
        }
```

```
print('Print using print function \n', ndict)
```

```
print('-'* 25 ,'\n')
```

```
import pprint
```

```
print('Printing using pprint() function')
```

```
pprint.pprint(ndict)
```

Print using print function

```
{0: {'Name': 'John', 'Age': '23', 'Residence': {'Country': 'USA', 'City': 'New York'}}, 1: {'Name': 'Jose', 'Age': '44', 'Residence': {'Country': 'India', 'City': 'Bangalore'}}
```

Printing using pprint() function

```
{0: {'Age': '23',
      'Name': 'John',
      'Residence': {'City': 'New York', 'Country': 'USA'}},
 1: {'Age': '44',
      'Name': 'Jose',
      'Residence': {'City': 'Bangalore', 'Country': 'India'}}
```

Loading [MathJax]/jax/output/CommonHTML/fonts/TeX/fontdata.js