

## assignment 5

June 5, 2023

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

ANS: `dic = { }`

```
[1]: dic = { }  
     type(dic)
```

```
[1]: dict
```

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

ANS: `{'foo' : 42}`

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

ANS: Most significant difference:

List - items in list are Ordered

Dictionary : items in dictionary are unordered

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

```
[4]: spam = {'bar' : 100}  
     spam['foo']
```

```
-----  
KeyError                                Traceback (most recent call last)  
Cell In [4], line 2  
      1 spam = {'bar' : 100}  
----> 2 spam['foo']  
  
KeyError: 'foo'
```

we get a `KeyError` error.

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, both check if 'cat' is key of the dictionary and if its a key, returns `True`.

```
[6]: spam = {'cat' : 100}
     'cat' in spam
```

[6]: True

```
[9]: spam = {'cat' : 100}
     'cat' in spam.keys()
```

[9]: True

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

ANS: 'cat' in spam checks whether there is a 'cat' key in the dictionary

'cat' in spam.values() checks whether there is a value 'cat' for one of the keys in spam.

```
[14]: spam = {'cat':100}
      'cat' in spam
```

[14]: True

```
[13]: spam = {'cat' : 100}
      'cat' in spam.values()
```

[13]: False

7. What is a shortcut for the following code?

if color not in spam:

spam[color] = black

ANS: This can be achieved by using setdefault() which Inserts key with a value of default if key is not in the dictionary.

```
[27]: spam = {'cat':100}
      spam.setdefault('color','black')
      spam
```

[27]: {'cat': 100, 'color': 'black'}

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

ANS: Pretty printing means to present something in a more readable format or style

```
[28]: import pprint
```

```
[29]: document = [ {'Name': 'John', 'Age': '23', 'Country': 'USA'},
                  {'Name': 'Jose', 'Age': '44', 'Country': 'Spain'},
                  {'Name': 'Anne', 'Age': '29', 'Country': 'UK'},
```

```
{'Name': 'Lee', 'Age': '35', 'Country': 'Japan'}  
]
```

```
[30]: # printing with pprint()  
pprint.pprint(document)
```

```
[{'Age': '23', 'Country': 'USA', 'Name': 'John'},  
 {'Age': '44', 'Country': 'Spain', 'Name': 'Jose'},  
 {'Age': '29', 'Country': 'UK', 'Name': 'Anne'},  
 {'Age': '35', 'Country': 'Japan', 'Name': 'Lee'}]
```

```
[31]: print(document)
```

```
[{'Name': 'John', 'Age': '23', 'Country': 'USA'}, {'Name': 'Jose', 'Age': '44',  
'Country': 'Spain'}, {'Name': 'Anne', 'Age': '29', 'Country': 'UK'}, {'Name':  
'Lee', 'Age': '35', 'Country': 'Japan'}]
```

```
[ ]:
```