

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

```
In [1]: 1 dict = {}  
2 type(dict)
```

Out[1]: dict

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

```
In [2]: 1 {'foo' : 42}
```

Out[2]: {'foo': 42}

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

```
1 Most significant difference :-  
2 List - items in list are Ordered  
3 Dictionary - items in dictionary are Unordered.
```

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

```
In [3]: 1 spam = {'bar':100}  
2 spam['foo']  
3 #This will give us key error
```

```
-----  
KeyError                                Traceback (most recent call last)  
~\AppData\Local\Temp\ipykernel_15876\2620492333.py in <module>  
      1 spam = {'bar':100}  
----> 2 spam['foo']  
      3 #This will give us key error  
  
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()?

```
In [4]: 1 spam={'cat':100}  
2 'cat' in spam
```

Out[4]: True

```
In [5]: 1 'cat' in spam.keys()  
2 #There is no difference, both check if 'cat' is key of the dictionary and if its a key, returns True.
```

Out[5]: True

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

```
In [6]: 1 spam={'cat':100}  
2 'cat' in spam
```

Out[6]: True

```
In [7]: 1 spam={'cat':100}  
2 'cat' in spam.values()  
3  
4 #'cat' in spam checks whether there is a 'cat' key in the dictionary  
5 #'cat' in spam.values() checks whether there is a value 'cat' for one of the keys in spam.
```

Out[7]: False

7. What is a shortcut for the following code?

```
In [8]: 1 spam = {'cat' :100}  
2 spam.setdefault('color', 'black')  
3 spam
```

Out[8]: {'cat': 100, 'color': 'black'}

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

In [9]:

```
1 import pprint
2 dct = [ {'Name': 'Shiva', 'Age': '23', 'Country': 'India'},
3         {'Name': 'Anna', 'Age': '44', 'Country': 'China'},
4         {'Name': 'Joe', 'Age': '29', 'Country': 'UK'},
5         {'Name': 'Chumlee', 'Age': '35', 'Country': 'USA'}
6     ]
```

In [10]:

```
1 # printing with pprint()
2 pprint.pprint(dct)
```

```
[{'Age': '23', 'Country': 'India', 'Name': 'Shiva'},
 {'Age': '44', 'Country': 'China', 'Name': 'Anna'},
 {'Age': '29', 'Country': 'UK', 'Name': 'Joe'},
 {'Age': '35', 'Country': 'USA', 'Name': 'Chumlee'}]
```

In [12]:

```
1 #Printing with print()
2 print(dct)
```

```
[{'Name': 'Shiva', 'Age': '23', 'Country': 'India'}, {'Name': 'Anna', 'Age': '44', 'Country': 'China'}, {'Name': 'Joe', 'Age': '29', 'Country': 'UK'}, {'Name': 'Chumlee', 'Age': '35', 'Country': 'USA'}]
```

In [ ]:

```
1
```