Assignment - 5

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

```
In [1]: empty_dict = {}
```

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

```
In [2]: #42
        my_dict = {"foo":42}
        my_dict.values()
```

```
Out[2]: dict_values([42])
```

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

In Lists, INDEX number is used to call a particular data. Whereas, in Dictionaries KEY is used to call a particular data.

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

```
In [3]: spam = {"bar": 100}
        spam['foo']
        # 'foo' is not present in the dictionary.

        ---------------------------------------------------------------------
        KeyError                          Traceback (most recent call last)
        Cell In[3], line 2
              1 spam = {"bar": 100}
        ----> 2 spam['foo']

        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]: spam = {"cat":5}
        print(type("cat"))    #it is accessed as String datatype.

        print(type(spam.keys())) #it is accessed as DICT_type datatype.
```

```
<class 'str'>
<class 'dict_keys'>
```

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

```
In [5]: spam = {"cat":5}
        print(type(5))    #it is accessed as INT (Integer) datatype.

        print(type(spam.values())) #it is accessed as DICT_values datatype.
```

```
<class 'int'>
<class 'dict_values'>
```

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

```
In [8]: if 'color' not in spam:spam['color'] = 'black'

        spam.setdefault('color','black')   #shortcut
```

```
Out[8]: 'black'
```

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

```
In [10]: #using module

         import pprint    #pretty print

         dct_acn =[
             {'Name': 'John', 'Age': '23', 'Country': 'USA'},
             {'Name': 'Jona', 'Age': '25', 'Country': 'IND'},
             {'Name': 'Anna', 'Age': '21', 'Country': 'UK'}
         ]

         pprint.pprint(dct_acn)
```

```
[{'Age': '23', 'Country': 'USA', 'Name': 'John'},
 {'Age': '25', 'Country': 'IND', 'Name': 'Jona'},
 {'Age': '21', 'Country': 'UK', 'Name': 'Anna'}]
```

```
In [1]: #using function

        import json    #pretty print

        dct_acn =[
            {'Name': 'John', 'Age': '23', 'Country': 'USA'},
            {'Name': 'Jona', 'Age': '25', 'Country': 'IND'},
            {'Name': 'Anna', 'Age': '21', 'Country': 'UK'}
        ]

        print(json.dumps(dct_acn, sort_keys=False, indent=1))
```

```
[
 {
  "Name": "John",
  "Age": "23",
  "Country": "USA"
 },
 {
  "Name": "Jona",
  "Age": "25",
  "Country": "IND"
 },
 {
  "Name": "Anna",
  "Age": "21",
  "Country": "UK"
 }
]
```