

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

Solution:-

```
dict={}
# Printing the empty dictionary
print(type(dict))
print(dict)
```

[3] ✓ 0.0s

```
... <class 'dict'>
    {}
```

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

Solution:-

```
dict={"foo":42}
print(dict.values())
```

[7] ✓ 0.0s

```
... dict_values([42])
```

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

Solution:- In list you can only store the elements but in dictionary you can store the key value pair

The items in dictionary are unordered and the items in the list are ordered

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

Solution:- It will give the keyerror

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

[10] ✗ 0.0s

```
... -----
KeyError                                Traceback (most recent call last)
Cell In[10], line 2
      1 spam={'bar':100}
----> 2 print(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()?

Solution:- There is no difference in the both function both will check whether value exist as a key or not

```
spam={"cat":"animal","color":"white","origin":"India","home":"Indian_Home"}
print(spam["cat"])
```

[13] ✓ 0.0s

```
... animal
```

```
spam={"cat":"animal","color":"white","origin":"India","home":"Indian_Home"}
print(spam.keys())
[15] ✓ 0.0s
... dict_keys(['cat', 'color', 'origin', 'home'])
```

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

Solution:- 'cat' in spam check whether cat is present or not and spam.values() will check whether there is any values corresponding to the key

```
spam={"cat":"animal","color":"white","origin":"India","home":"Indian_Home"}
print(spam["cat"])
[13] ✓ 0.0s
... animal
```

```
spam={"cat":"animal","color":"white","origin":"India","home":"Indian_Home"}
print(spam.values())
[16] ✓ 0.0s
... dict_values(['animal', 'white', 'India', 'Indian_Home'])
```

7. What is a shortcut for the following code?

if 'color' not in spam:

spam['color'] = 'black'

Solution:-

```
span={"one":1,"two":2,"three":3,"four":4}
# By using span.default function
span.setdefault('color','black')
print(span)
[23] ✓ 0.0s
... {'one': 1, 'two': 2, 'three': 3, 'four': 4, 'color': 'black'}
```

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

Solution:- By importing the json module and using the json.dumps



```
import json
span={"one":1,"two":2,"three":3,"four":4}
span_dict = json.dumps(span, indent=5)
print(span_dict)
```

[27] ✓ 0.0s

```
... {
    "one": 1,
    "two": 2,
    "three": 3,
    "four": 4
}
```