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

Ans.

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

Ans.

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

**Ans.** A dictionary can be created while using keys and values , where each key will represent a value.

In case of list the values are stored or accessed with the usage of indexes which start from 0.

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

**Ans.** It will give an error since there is no key called '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.

```
spam = {"adsfsd":4646, 5:"cat"} #cat in spam will check if there are any values called "cat" in dictionary keys

'cat' in spam
False

'cat' in spam.keys() #it will also check if "cat" is in spam keys
False
```

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

## Ans.

```
spam = {"adsfsd":4646, 5:"cat"} #cat in spam will check if there are any values called "cat" in dictionary keys

'cat' in spam
False

'cat' in spam.values() #it will check if "cat" is in spam values

True
```

7. What is a shortcut for the following code?

if 'color' not in spam:

spam['color'] = 'black'

Ans.

```
spam = {"asdfasdf": 454, 5:"cat"}

if 'color' in spam.keys(): #method 1
    print(spam)

else:
    spam['color']='black'
    print(spam)

{'asdfasdf': 454, 5: 'cat', 'color': 'black'}

if 'color' not in spam.keys(): #method 2
    spam['color']='black'
    print(spam)

{'asdfasdf': 454, 5: 'cat', 'color': 'black'}
```