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

Ans:

An empty dictionary in Python looks like this: {}

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

Ans:

For the dictionary named value,

value = {'foo' : 42}

Here the value is 42 and ‘foo’ is the key

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

Ans:

The most significant distinction between a dictionary and a list is that a dictionary is an unordered collection of key-value pairs accessed by unique keys, while a list is an ordered collection of elements accessed by index.

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

Ans:

If you try to access spam['foo'] if spam is {'bar': 100}, you will get a KeyError. This is because the key foo does not exist in the dictionary spam.

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

Ans:

'cat' in spam only checks if the key ‘cat’ exists in spam, while 'cat' in spam.keys() checks if the value ‘cat’ is the key of any key-value pairs in the dictionary.

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

Ans:

'cat' in spam checks if the key 'cat' exists in the dictionary spam, while 'cat' in spam.values() checks if the value 'cat' exists for any key in the dictionary spam.

**7.** What is a shortcut for the following code?

if 'color' not in spam:

spam['color'] = 'black'

Ans:

The shortcut for the following code is:

spam.setdefault('color', 'black')

The setdefault() function takes two arguments: the key and the default value. If the key does not exist in the dictionary, the method will set the key to the default value. In this case, the key is 'color' and the default value is 'black'.

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

Ans:

To pretty print dictionary values we use the pprint() function from the pprint module.