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

**Ans.** An empty dictionary in Python is represented as curly braces {} with no elements inside. For example:

empty\_dict = {}

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

**Ans.** The value of a dictionary value with the key ’foo’ and the value 42 is **{‘foo’:42}.**

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

**Ans.** The most significant distinction between a dictionary and a list in Python is that a dictionary is a collection of key-value pairs, while a list is a collection of ordered values.

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}, a KeyError will be raised, because the key [‘foo’] is not the dictionary.

5. If a dictionary is stored in spam, what is the difference between the expression’s ‘cat’ in spam and ‘cat’ in spam.keys() ?

**Ans.** The expression ‘cat’ in spam checks if the string ‘cat’ is one of the values in the dictionary spam.

The expression ‘cat’ in spam.keys() checks if the string ‘cat’ is one of the keys in the dictionary spam.

These two expressions return different results if ‘cat’ is value but not key in the dictionary spam.

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

**Ans.** The expression 'cat' in spam checks if the key 'cat' exists in the dictionary 'spam', and returns True or False based on its presence.

On the other hand, 'cat' in spam.values() checks if the value 'cat' exists in the values of the dictionary 'spam', and also returns True or False.

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’).**

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

**Ans.** To "pretty print" dictionary values, you can use the "pprint" module and the "pprint" function.

The "pprint" function stands for "pretty print" and provides a more readable and organized output of dictionary values compared to the standard "print" function.