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

Ans-An empty dictionary's code is simply a pair of curly braces: {}.

**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 would look like this: {'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 is that a dictionary stores values in key-value pairs, while a list simply stores values in an ordered sequence.

**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, since the key 'foo' does not exist in the dictionary.

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

Ans-If a dictionary is stored in spam, the expression 'cat' in spam checks if the key 'cat' exists in the dictionary, while the expression 'cat' in spam.keys() checks if 'cat' is a key 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-If a dictionary is stored in spam, the expression 'cat' in spam checks if the value 'cat' exists in any of the dictionary's values, while the expression 'cat' in spam.values() checks if 'cat' is a value in the dictionary.

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

**if 'color' not in spam:**

**spam['color'] = 'black'**

Ans-You can use the setdefault() method to set a default value for a key if it does not already exist in the dictionary. The shortcut for the given code would be: spam.setdefault('color', 'black')

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

Ans-You can use the pprint module and the pprint() function to pretty print dictionary values. You can import the pprint module and then call pprint() function, passing the dictionary as an argument. For example: ‘import pprint’ and ‘pprint.pprint(my\_dict)’