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

An empty dictionary can be represented as follows:

empty\_dict = {}

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

value = {'foo': 42}

value['foo'] is 42

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

A list can contain duplicate values, while in a dictionary, values can be duplicated but keys must be unique; otherwise, duplicate keys will be removed. Additionally, a list is a heterogeneous collection of items without keys, whereas a dictionary associates keys with values.

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

spam = {'bar': 100}

Accessing spam['foo'] will result in 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()?

spam = {‘cat’:’cat’}

Using the keys() method will return the key 'cat' as a list ['cat'].

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

'cat' in spam.keys()?

spam = {‘cat’:’cat’}

Using the keys() method will return the key 'cat' as a list ['cat'].

7. What is a shortcut for the following code?

if 'color' not in spam:

spam['color'] = 'black'

spam.get('color', 'black') is the shortcut.

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

```python

import pprint

my\_dict = {'a': 3, 'b': 8}

pprint.pprint(my\_dict)

```