Certainly, here are the answers to your questions:

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

An empty dictionary's code looks like `{}`.

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

The value of the dictionary entry with the key 'foo' and the value 42 is `42`.

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

The most significant distinction between a dictionary and a list is that a dictionary stores key-value pairs, where each key is unique and maps to a value. A list is an ordered collection of elements that can be of any data type. In a list, elements are indexed by their position, while in a dictionary, they are indexed by their keys.

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

If you try to access `spam['foo']` and `'foo'` is not a key in the dictionary `spam`, you will get a `KeyError` because 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()`?

Both expressions check if the key `'cat'` exists in the dictionary `spam`. The difference is that `'cat' in spam` checks for the key directly in the dictionary, while `'cat' in spam.keys()` explicitly checks for the presence of the key within the dictionary's keys.

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` checks if `'cat'` exists as a key in the dictionary, while `'cat' in spam.values()` checks if `'cat'` exists as a value in the dictionary.

7. What is a shortcut for the following code?

```python

if 'color' not in spam:

spam['color'] = 'black'

```

A shortcut for the above code is:

```python

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

```

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

To "pretty print" dictionary values, you can use the `pprint` module and its `pprint()` function. You need to import the `pprint` module and then call the `pprint()` function with the dictionary as an argument to display it in a more readable format.