1. An empty dictionary created using the curly braces ‘{}’
2. 42 is the value of a dictionary value with the key ‘foo’ and the value 42.

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| List | Dictionary |
| Ordered Collection of items in the list. Each item is assigned with the index starting with 0. | Unordered collection of key-value pairs. Each items has a unique key |
| Accessing elements by the list. Retrieve by my\_list[0], for the first element in the list. | Accessing elements by their keys. Retrieve the value from the key, my\_dict[‘key’] |
| Defined by square brackets “[ ]” Example: my\_list = [1, 2, 3] | Defined using curly braces “{}” with key-value pairs. Example: my\_dict = {‘key’: ‘value’, ‘another\_key’: 42} |

1. While trying to access spam[‘foo’], if spam is {‘bar’: 100}, it gives ‘KeyError’. Because there is no key element in the name of ‘foo’, so it shows the error.
2. **‘cat’ in spam** refers to the direct check for the existence of the key in the dictionary and the most common one. **‘cat’ in spam.keys()** refers to retrive the list of keys in the dictionary to check the existence of the key ‘cat’. Both the expressions have the same output, their way of checking the key makes the difference.
3. **‘cat’ in spam** refers to the expression to check the specific key in the dictionary spam. **‘cat’ in spam.values()** refers to the expression to check the specific value by retrive the list of values in the dictionary spam
4. spam.setdefault(‘color’, ‘black’)
5. To “pretty print” dictionary values in python, ‘pprint’ module have used from the ‘pprint’ standard library. The ‘pprint’ module provides a ‘pprint()’ function that formats the dictionary in a more readable way with indentation and line breaks.