1. What does the code for an empty dictionary look like?

**Answer:** The code for an empty dictionary look like: **item ={} or item = dict()**

2. What does a dictionary value with a key 'foo' and a value 42 look like?

**Answer:** item = {‘foo’:42”} in this way the key ‘foo’ and value 42 look like

3. What is the main difference between a dictionary and a list?

**Answer:**

|  |  |
| --- | --- |
| **LIST** | **DICTIONARY** |
| List is a collection of index values pairs as that of array in c++. | Dictionary is a hashed structure of Key and Value pairs. |
| List is created by placing elements in [] separated by commas “,”. | Dictionary is created by placing elements in {} as “key”: “value”, each key value pair is separated by commas “,”. |
| The indices of list are integers starting from 0. | The keys of dictionary can be of any data type. |
| The elements are accessed via indices. | The elements are accessed via key-values. |
| The order of the elements entered are maintained | There is no guarantee for maintain order. |

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

**Answer:** It raises an error called **KeyError.**

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

**Answer:** There is no difference between the expressions. In **‘cat’ in spam** checks whether cat key is present in spam or not. In **‘cat’ in spam.keys()** also checks whether cat key is present in spam or not.

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

**Answer:** Here the difference between the given expressions is: in **‘cat’ in spam** checks whether cat key is present in spam or not. In **‘cat’ in spam.values()** checks whether cat value is present in spam or not.

7. What is a shortcut for the following code?

if 'color' not in spam:

spam['color'] = 'black'

**Answer:**  The shortcut code for above code is : **spam.setdefault(‘color’,’black’)**

8. What module and function can be used to “pretty print” dictionary values?

**Answer:** Module and function is **pprint.pprint()**