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

Ans: An empty dictionary in python is represented by open and close curly parenthesis {}.

e.g. my\_dictionary = {}

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

Ans: The value of a dictionary with above value and key will looks like:

{‘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:

1. Dictionary: Stores data in key-value pair, it allows us to access values using unique key.
2. List: Stores data in ordered sequence, it allows us to access elements by index.

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

Ans: If you try to access spam[‘foo’], and spam is {'bar': 100}, it will give you key error because foo does not exists in 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: cat in spam : checks if the key ‘cat’ exists in the dictionary.

Cat in the spam.keys() checks if the key ‘cat’ exists in the keys of 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: cat in spam : checks if the key ‘cat’ exists in the dictionary.

Cat in the spam.values() checks if the value ‘cat’ exists in the any values of the dictionary.

7. What is a shortcut for the following code?

if 'color' not in spam:

spam['color'] = 'black'

Ans: A shortcut for the above code would be:

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

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

Ans: for this first we need to:

import pprint

my\_dict = {‘Name: Alice, ‘Age’:32}

pprint.pprint(my\_dict)