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

Ans:

Empty dictionary: m\_dict = {}

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

Ans: The value of the dictionary is 42.

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

Ans:

A dictionary is like a bag where you can put things and label them with unique names. Each thing you put in the bag has a specific name, and you can easily find it by using that name. It doesn't matter where things are placed in the bag; you can always find them by their names. This is useful when you want to organize data based on specific categories or map relationships between different items. On the other hand, a list is like a line of numbered boxes where you can put things in a specific order. Each box has a number, and the things are arranged in that order. If you want to find something, you can simply go to the box with the corresponding number and get it. Lists are handy when the order of items matters, and you want to access them based on their position in the line.

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

Ans: There will be a key error.

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

Ans:

Both the method go through the keys of the dictionary but the spam.keys() is used for more specification on keys.

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

Ans:

The “cat” in spam checks the keys while, “cat” in spam.values() checks the “cat” value inside the value component of the spam dictionary.

7. What is a shortcut for the following code?

if 'color' not in spam:

spam['color'] = 'black'

Ans:

The shortcut for the above code can be achieved by use of setdefault() method.

e.g. spam.setdefault(“color”,”black”)

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

Ans:

Pretty print of dictionary can be achieved by pprint function from pprint module.

e.g. import pprint

pprint.pprint(spam)