Ans. 1. Empty\_dict = {}

Ans. 3. The most significant distinction between a dictionary and a list is the way they store their elements. A list is a collection object used to store data in a sequential manner. Each element in a list has a particular position, and we can access the data randomly using their position. On the other hand, a dictionary contains key-value pairs that don’t have a particular position. We use the key to access the value in a dictionary, whereas we use the index of an element to access an element in a list.

 Lists can contain duplicates, whereas a dictionary's keys must be unique.

Ans. 4. spam = {'bar': 100}

print(spam["foo"])

KeyError: 'foo'

Ans. 5.  The expressions 'cat' in spam and 'cat' in spam.keys() are equivalent because spam.keys() returns a dynamic view object of the dictionary's keys that reflects any changes to the dictionary.

Ans. 7. A shortcut for the code if 'color' not in spam: spam['color'] = 'black' is to use the setdefault() method, The setdefault() method returns the value of a key in a dictionary. If the key does not exist, setdefault() adds the key-value pair to the dictionary with the specified default value.

spam = {'bar': 100}

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

print(spam) # output: {'bar': 100, 'color': 'black'}

Ans. 8. To "pretty print" dictionary values in Python, you can use the pprint module, specifically the pprint function. The pprint module provides a way to format the output of data structures, including dictionaries, in a more readable and organized manner.