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

Dictionary\_1 = {}

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

Dictionary\_1 = {'foo': 42}

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

the key differences between a dictionary and a list are:

Order: Lists maintain the order of elements based on their position, while dictionaries do not guarantee any specific order for the key-value pairs.

Accessing elements: In a list, elements are accessed by their index, whereas in a dictionary, elements are accessed by their keys.

Duplicate keys: Dictionaries require unique keys, whereas lists can have duplicate elements.

Mutable vs. Immutable: Lists are mutable, meaning you can modify, add, or remove elements from them. Dictionaries are also mutable, allowing you to change the values associated with the keys, add new key-value pairs, or remove existing pairs.

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

spam = {'bar': 100}

spam['foo']

It will give a error as **KeyError**: 'foo'

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

There is no difference

'cat' in spam: This expression checks whether there is a 'cat' KEY in the dictionary

'cat' in spam.keys(): This will checks whether there is a key 'cat' in spam.

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

cat' in spam: This expression checks whether there is a 'cat' KEY in the dictionary

'cat' in spam.values(): This will checks whether there is a value 'cat' in spam.

1. What is a shortcut for the following code?

if 'color' not in spam:

spam['color'] = 'black'

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

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

By importing pprint and using pprint.pprint(dict\_name)

import pprint

pprint.pprint(spam)