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

**Ans:- d = {}**

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

**Ans:- d1={‘foo’:42}**

**Value is 42**

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

**Ans:- Items in list are traversed by their index values. However, in dictionary we traverse each element by their associated key. Also, a list can have duplicate values in it but a dictionary allows unique keys.**

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

**Ans:- It throws KeyError because the key ‘foo’ has not been defined.**

1. 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 -> this statement looks out for ‘cat’ key in dictionary implicitly.**

**‘cat’ in spam.keys() -> this statement explicitly looks out for ‘cat’ key in 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 -> this statement searches for ‘cat’ in keys of spam dictionary and return Boolean value.**

**‘cat’ in spam.values() -> this statement searches for ‘cat’ in values of spam dictionary and return Boolean value**

7. What is a shortcut for the following code?

if 'color' not in spam:

spam['color'] = 'black'

**Ans:- The below code would also work but if ‘color’ already exists then it’s value will be overridden.**

**Spam[‘color’]=’black’**

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

**Ans:-**

**from pprint import pprint**

**data = {'name': {'Abhinay','Ashish','Kanika','Kashish'}, 'age':{28,30,29,26}}**

**pprint(data, indent=1, width=20)**