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

{}

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

{‘foo’:42}   
value=42

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

In dictionary we have keys, we can define key as numeric,alpha,tuple, and value can be any thing.

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

Error while occur as there is not key as ‘foo’

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7. What is a shortcut for the following code?

if 'color' not in spam:

spam['color'] = 'black'

ans: spam{‘color’:’black’}

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

Following can be used to do it:  
from pprint import pprint