

## 1. What does an empty dictionary's code look like? `my_dict = {} my_dict = dict()`

In [5]:

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

```
dict={'foo':42}
```

```
value=dict['foo']  
print(value)
```

42

In [ ]:

```
'''3. What is the most significant distinction between a dictionary and a list?
```

```
list: a list is an ordered collection of elements
```

```
dictionary: a dictionary is an unordered collection of key-value pairs'''
```

In [ ]:

In [8]:

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

```
spam = {'bar': 100}  
value = spam['foo']
```

```
'''raised a key error because foo is not the valid key in dictionary spam'''
```

**KeyError**

Traceback (most recent call last)

Cell In[8], line 4

```
1 #4. What happens if you try to access spam['foo'] if spam is {'bar': 100}?  
3 spam = {'bar': 100}  
----> 4 value = spam['foo']
```

**KeyError: 'foo'**

In [ ]:

In [ ]:

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

```
spam={'cat'}
```

```
'cat' in spam
```

```
>his expression checks whether the key 'cat' exists in the dictionary spam.
```

```
>it returns a Boolean value True or False
```

```
>indicating whether the key 'cat' is present as a direct key in the dictionary.
```

```
#spam={'cat'}
```

```
#'cat' in spam.keys()
```

```
>this expression also checks whether the key 'cat' exists in the dictionary spam
```

```
>it does so by explicitly calling the keys() method of the dictionary to obtain a list of  
keys
```

```
and then checking if 'cat' is in that list.'''
```

In [ ]:

In [ ]:

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

```
'cat' in spam:
```

```
this expression checks whether the key 'cat' exists in the dictionary spam.
```

```
'cat' in spam.values():
```

```
this expression checks whether the value 'cat' exists in the dictionary spam among its va  
lues.'''
```

In [ ]:

In [ ]:

In [ ]:

```
'''7. What is a shortcut for the following code?  
if 'color' not in spam:  
    spam['color'] = 'black'''  
#spam.setdefault('color', 'black')
```

In [ ]:

In [ ]:

In [ ]:

```
'''8. How do you 'pretty print' dictionary values using which module and function?  
  
You can "pretty print" dictionary values in Python using the  
pprint module and its pprint() function. '''
```

In [ ]: