CS 931: Dictionaries

Dictionaries

```
>>> inventory = {}   # an empty dictionary
>>> inventory['apple'] = 6
>>> inventory['orange'] = 12
>>> inventory['banana'] = 4
>>> inventory['orange']
4
>>> inventory['coconut']

Traceback (most recent call last):
  File "<pyshell#49>", line 1, in <module>
    inventory['coconuts']
KeyError: 'coconuts'
>>>
```

A dictionary contains a set of key/value pairs. In the example of the slide, 'apple', 'orange', and 'banana' are keys, and 6, 12, and 4 are values

Dictionaries

```
>>> def addfruit(fruit, quant, inv):
        if fruit in inv:
            inv [fruit] += quant
        else:
            inv [fruit] = quant

>>> addfruit('orange', 6)
>>> addfruit('guava', 3)
>>> inventory['orange']
18
>>> inventory['guava']
3
```

Dictionaries

```
>>> def printinventory():                    iterates over
        for f in inventory.iterkeys():        inventory's keys
            print f, inventory[f]


>>> printinventory()
orange 18
guava 3
apple 6
banana 4
```