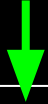


COMP
110

Dictionaries + for loops

Dictionaries

Keys



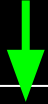
Values



Flavor	Num Orders
"chocolate"	12
"vanilla"	8
"strawberry"	5

Dictionaries

Keys



Values



Flavor	Num Orders
"chocolate"	12
"vanilla"	8
"strawberry"	5

Lists

Indexes



Values



0	12
1	8
2	5

Also called: Map, Hashmap, Key-Value Store

Syntax

- Create empty dict:

`<name>: dict[<key type>, <value type>] = {}` or

`<name>: dict[<key type>, <value type>] = dict()`

- Create populated dict:

`<name>: dict[<key type>, <value type>] = {key_0: val_0, key_1: val_1, ...}`

- Add/Change Elements: `<name>[<key>] = <value>`

- Remove Elements: `<name>.pop(<key>)`

- Check if key in dictionary: `<key> in <dict name>`

“for” Loops

“for” loops iterate over the *keys* by default

```
for key in <name>:  
    print(key)
```

```
for key in <name>:  
    print(<name>[key])
```

```
for key in my_dictionary:
```

iterates over

dict[str,str]	
“A”	“w”
“B”	“x”
“C”	“y”
“D”	“z”

Practice

```
in_stock: dict[str, bool] = {"carrots": True, "beets": False, "apples": True}
```

- Print all keys that have the value "True".

Challenge Question

- Function names: `get_keys` and `get_values`
- Input a dictionary, and return lists of their keys and values, respectively.
- (More info on website!)