

Python Dictionaries



PACKAGE OF ITEMS

- A convenient package to store many items
- One variable used to store all of the items
- The variable contains many locations to store the various items
- There are various ways of accessing these locations





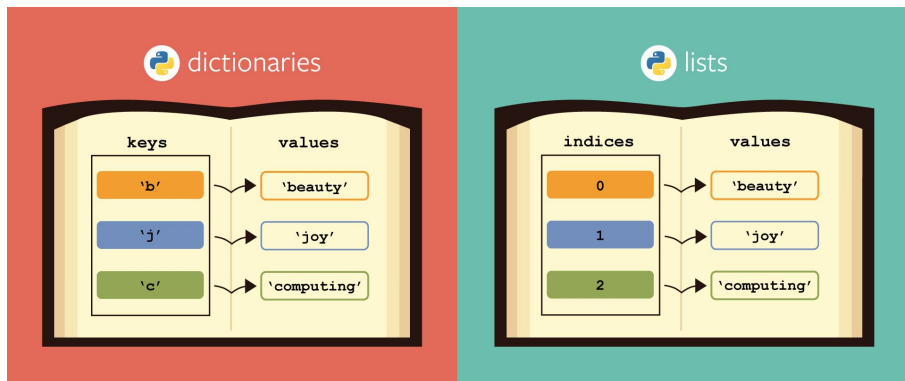
LISTS VS DICTIONARIES

LIST

- HOLDS MANY VALUES
- ORDERED
- VALUES ACCESSED BY INDEX
- VALUES CAN BE OF ANY TYPE

DICTIONARY

- HOLDS MANY VALUES
- UNORDERED
- VALUES ACCESSED BY UNIQUE KEY
- VALUES CAN BE OF ANY TYPE





DICTIONARY PROPERTIES

DICTIONARY

- KEYS MUST BE OF AN IMMUTABLE TYPE
- KEYS CAN BE A MIX OF TYPES
- VALUES CAN BE OF ANY TYPE
 - STRING, LIST, SET, INT, TUPLE, DICT, FLOAT



LIST VS DICTIONARY OPERATIONS

LIST

- create
- delete an item
- get an item
- update an item
- append an item
- get all items

DICTIONARY

- create
- delete a key -> value pair
- get a value
- update a value
- insert a key -> value pair
- get all keys
- Check membership



DICTIONARY OPERATIONS

create	<code>my_dict = {}</code> or <code>my_dict= {'bob' : 5}</code>
insert	<code>my_dict['jim'] = 5</code>
update	<code>my_dict['jim'] = 7</code>
delete	<code>del my_dict['jim']</code>
Get a value	<code>my_dict['jim']</code>
Get all keys	<code>my_dict</code> or <code>my_dict.keys()</code>
Check membership	<code>'Jim' in my_dict</code>
Get all values	???