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Dictionaries

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\}

{key: value}

A dictionary is a data structure for storing pairs of values.

Values can be accessed by their keys.

Like lists, dictionaries are mutable.

Keys are unique and cannot be repeated within a dictionary.

Keys must be immutable and cannot be a list or dictionary.

Values are, however, mutable.
Dictionaries

Methods

d.items()
d.keys()
d.values()
d.get(key)
d.pop(key)
d.popitem()
d.clear()
d.copy()
d.fromkeys(s, t)
Lists vs. Dictionaries

Order
• Lists are ordered
• Dictionaries are unordered

Access
• Lists require a numeric index to access individual items
• Dictionary values are accessed by their unique key

General Guideline
• If order matters, use a list
• If you need to access values with a unique key, use a dictionary
**Tuples**

( )

A tuple is an immutable sequence of 0 or more values

Enclosed in round brackets, items separated by a comma

Tuples with a single item must be followed by a comma: (x, )

Once created, it cannot be changed, which can help prevent errors

Use indexing and slicing to access individual elements
A set is a collection of 0 or more items with no duplicates

A good way to remove duplicates from a sequence

Two categories: mutable sets and immutable frozensets