Summary of Container Data Types

The table below shows a brief summary of the main container data types built into Python. If an option is described as "linear" below, it means that the operation gets proportionally slower as the collection grows; and "constant" means that the operation takes roughly the same amount of time regardless of the size of the collection.

Type	Can Contain...	Ordered?	Mutable?	Hashable?	Indexing (`x[...]`)	Adding Elements	Deleting Elements	Containment (`in`)
`list`	Any objects	Yes	Yes	No	constant	constant at end (`append`) linear elsewhere	constant at end (`pop()`) linear elsewhere	linear
`tuple`	Any objects	Yes	No	Maybe[1]	constant	N/A	N/A	linear
`set`	Hashable objects	No	Yes	No	N/A	constant	constant	constant
`frozenset`	Hashable objects	No	No	Yes	N/A	N/A	N/A	constant
`dict`	Hashable keys, Any values	Yes[2]	Yes	No	constant	constant	constant	constant (keys)

Footnotes

[1] `tuple` objects are hashable only if *all* elements contained therein are hashable.

[2] `dict` objects maintain their key/value pairs in *insertion* order (in the order in which they were added to the dictionary)