

Copilot

Certainly! Let’s compare lists, tuples, dictionaries, and sets in a tabular form:

Feature	List	Tuple	Dictionary	Set
Definition	Ordered collection of elements	Ordered collection of elements	Unordered collection of key-value pairs	Unordered collection of unique elements
Syntax	<code>my_list = [1, 2, 3]</code>	<code>my_tuple = (1, 2, 3)</code>	<code>my_dict = {'name': 'Alice', 'age': 30}</code>	<code>my_set = {1, 2, 3}</code>
Mutability	Mutable (can be modified)	Immutable (cannot be modified)	Mutable (can be modified)	Mutable (can be modified)
Indexing	Access elements by index	Access elements by index	Access values by keys	No indexing (unordered)
Duplicates	Allows duplicates	Allows duplicates	Keys must be unique; values can be duplicated	No duplicates (unique elements)
Order	Maintains order of insertion	Maintains order of insertion	No specific order	No specific order
Use Case	General-purpose data storage	Immutable data storage	Key-value mappings	Ensuring uniqueness of elements

Feel free to ask if you need further clarification or have any other questions! 😊