

Feature	List	Tuple	Set	Dictionary
Definition	Ordered and mutable collection	Ordered and immutable collection	Unordered mutable collection of Unique elements.	Unordered mutable collection of Key-value pair
Syntax	[1,2,3]	(1,2,3)	{1,2,3}	{'a':1,'b':2,'c':3}
Order	Ordered	Ordered	Unordered	Unordered
Duplicates	Allow duplicates	Allow duplicates	No duplicates allowed	No duplicates allowed
Mutability	Mutable	Immutable	Mutable	Keys are immutable Values are mutable
Indexing	Supports Indexing	Supports Indexing	Does not support Indexing	Supports Indexing by Keys
Methods	Many built-in methods like (append, remove and extend)	Fewer built-in methods like (count, index)	Fewer built-in methods like (add, remove)	Many built-in methods(get, keys, values)
Usage	General-purpose collection	Fixed collection of items	Unique collection of items	Key-value pairs for fast lookups.
Memory Overhead	Higher than Tuples	Lower than Lists.	Higher due to hashing.	Higher due to Hashing.
Performance	Slower than Tuples	Faster than Lists for Iteration.	Faster lookups than lists.	Faster lookups by Key.