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| --- | --- | --- | --- |
| **List** | **Dictionaries** | **Tuples** | **Sets** |
| List the most versatile collection object types and can store different data types | Dictionaries are used to store key-value pairs and keys should be unique | Tuples are same as Lists ,it can store different data types but with one exception | Sets are a collection of unordered elements that are unique |
| Can store different data types | Can store different data types | Can store different data types | Can store different data types |
| List written in [] | Dictionaries written in {} | Tuples written in () | Sets written in {} |
| Order is retained | Order doesn’t matter | Order is retained | Order is not retained |
| Duplicate values are allowed | Duplicate values are not allowed | Duplicate values are allowed | Duplicate values are not allowed |
| Mutable | Mutable | Immutable | Mutable |
| Indexing and Slicing is Possible | Indexing and Slicing is not Possible | Indexing and Slicing is Possible | Indexing and Slicing is not Possible |
| It is possible to search, add, and remove items from the list | It is possible to search, add, and remove items from the Dictionaries | we can’t add,remove, modify in tuple | Add and remove elements ,but you can’t modify existing elements in set |
| Syntax: list = [item 1, item 2, item 3,….., item n] | Syntax: dictionary ={“name:”Usha”,year :2020 } | Syntax: tuple = (item 1, item 2, item 3,….., item n) | Syntax: set = {“item 1”, “item 2”, “item 3”,….., “item n”} |

**Task8 – Differences between In-built data structures**