**TABLE – 1:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Collection VS Features** | **Mutable** | **Ordered** | **Indexing** | **Duplicate Data** |
| List | ✔ | ✔ | ✔ | ✔ |
| Tuple | x | ✔ | ✔ | ✔ |
| Set | ✔ | x | x | x |
| Dictionary | ✔ | ✔ | ✔ | x |

|  |  |  |  |
| --- | --- | --- | --- |

**TABLE-2:**

|  |  |  |  |
| --- | --- | --- | --- |
| **List** | **Tuple** | **Set** | **Dictionary** |
| List is a non-homogeneous data structure that stores the elements in single row and multiple rows and columns | Tuple is also a non-homogeneous data structure that stores single row and multiple rows and columns | Set data structure is also non-homogeneous data structure but stores in single row | Dictionary is also a non-homogeneous data structure which stores key value pairs |
| List can be represented by [ ] | Tuple can be represented by ( ) | Set can be represented by { } | Dictionary can be represented by { } |
| List allows duplicate elements | Tuple allows duplicate elements | Set will not allow duplicate elements | Set will not allow duplicate elements and dictionary doesn’t allow duplicate keys. |
| List can use nested among all | Tuple can use nested among all | Set can use nested among all | Dictionary can use nested among all |
| Example: [1, 2, 3, 4, 5] | Example: (1, 2, 3, 4, 5) | Example: {1, 2, 3, 4, 5} | Example: {1, 2, 3, 4, 5} |
| List can be created using **list()**function | Tuple can be created using **tuple()** function. | Set can be created using **set()** function | Dictionary can be created using **dict()**function. |
| List is mutable i.e. we can make any changes in list. | Tuple is immutable i.e. we cannot make any changes in tuple | Set is mutable i.e., we can make any changes in set. But elements are not duplicated. | Dictionary is mutable. But Keys are not duplicated. |
| List is ordered | Tuple is ordered | Set is unordered | Dictionary is ordered (Python 3.7 and above) |
| Creating an empty list  l=[] | Creating an empty Tuple  t=() | Creating a set  a=set()  b=set(a) | Creating an empty dictionary  d={} |