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| **Python Lists** |

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* **Introduction** :

creating lists, changing list elements, removing elements, and other list operations with the help of examples.[1]

[1]References : <https://www.programiz.com/python-programming/list>

**#Python List :[2]**

A list in Python is used to store the sequence of various types of data. Python lists are mutable type its mean we can modify its element after it created. However, Python consists of six data-types that are capable to store the sequences, but the most common and reliable type is the list.

**[2]** Reference:<https://www.javatpoint.com/python-lists>

**#Python List/Array Methods :[3]**

Python has a set of built-in methods that you can use on lists/arrays.

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| **Method** | **Description** |
| append() | Adds an element at the end of the list |
| clear() | Removes all the elements from the list |
| copy() | Returns a copy of the list |
| count() | Returns the number of elements with the specified value |
| Reverse() | Reverses the order of the list |
| sort() | Sorts the list |
| extend() | Add the elements of a list (or any iterable), to the end of the current list |
| index() | Returns the index of the first element with the specified value |
| insert() | Adds an element at the specified position |
| pop() | Removes the element at the specified position |
| remove() | Removes the first item with the specified value |

**[3]**References : <https://www.w3schools.com/python/python_ref_list.asp>

**#Access List Elements:[4]**

my\_list = ['p', 'r', 'o', 'b', 'e']

# first item

print(my\_list[0]) # p

# third item

print(my\_list[2]) # o

# fifth item

print(my\_list[4]) # e

# Nested List

n\_list = ["Happy", [2, 0, 1, 5]]

# Nested indexing

print(n\_list[0][1])

print(n\_list[1][3])

# Error! Only integer can be used for indexing

print(my\_list[4.0])

output:

p

o

e

a

5

Traceback (most recent call last):

File "<string>", line 21, in <module>

TypeError: list indices must be integers or slices, not float

[4]References : <https://www.programiz.com/python-programming/list>