

---

```
#Assign a list to an variable named my list
```

```
my_list = [1,2,3,4]
```

```
print(my_list)
```

```
⇒ [1, 2, 3, 4]
```

```
type(my_list)
```

```
⇒ list
```

```
my_list = ['A string', 23, 100.232, '0', True]
```

```
my_list
```

```
⇒ ['A string', 23, 100.232, '0', True]
```

```
len(my_list)
```

```
⇒ 5
```

```
list of strings
```

```
loss_functions = ['Mean Absolute Error', 'Mean Squared Error', 'Huber Loss', 'Log Loss', 'Hinge Loss']
```

```
print(loss_functions)
```

```
⇒ ['Mean Absolute Error', 'Mean Squared Error', 'Huber Loss', 'Log Loss', 'Hinge Loss']
```

```
#Grab the element at index 0, which is the FIRST element
```

```
print(loss_functions[0])
```

```
⇒ Mean Absolute Error
```

```
len(loss_functions)
```

```
⇒ 5
```

```
#Grab the element at index 3, which is the FOURTH element
```

```
print(loss_functions[3])
```

```
⇒ Log Loss
```

```
#Grab the element at the Index -1, which is the LAST element
```

```
print(loss_functions[-1])
```

⇒ Hinge Loss

```
#Grab the element at the index -3, which is the THIRD LAST element
```

```
print(loss_functions[-3])
```

⇒ Huber Loss

```
#Print our list
```

```
print(loss_functions)
```

⇒ ['Mean Absolute Error', 'Mean Squared Error', 'Huber Loss', 'Log Loss', 'Hinge Loss']

```
#Grab the elements starting from index 1 and everything past it
```

```
loss_functions[1:4]
```

⇒ ['Mean Squared Error', 'Huber Loss', 'Log Loss']

```
#Grab everything starting from index 2
```

```
loss_functions[2:]
```

⇒ ['Huber Loss', 'Log Loss', 'Hinge Loss']

```
#Grab everything before the index 4
```

```
loss_functions[:4]
```

⇒ ['Mean Absolute Error', 'Mean Squared Error', 'Huber Loss', 'Log Loss']

```
#Grab everything
```

```
print(loss_functions[:])
```

⇒ ['Mean Absolute Error', 'Mean Squared Error', 'Huber Loss', 'Log Loss', 'Hinge Loss']

```
#Grab the LAST FOUR elements of the list
```

```
loss_functions[-4:]
```

⇒ ['Mean Squared Error', 'Huber Loss', 'Log Loss', 'Hinge Loss']

```
new_list = [6, 9, 1, 3, 5.51]
```

```
min(new_list)
```

⇒ 1

```
my_new_list = ['c', 'b', 'z','y','']
```

```
min(my_new_list)
```

```
⇒ ''
```

```
new_list = ['Argue', 'Burglar', 'zarent', 'Linear', 'shape']
```

```
max(new_list)
```

```
⇒ 'zarent'
```

```
new_list = [6, 9, 1, 3, 5.5]
```

```
sum(new_list)
```

```
⇒ 24.5
```

```
print(new_list)
```

```
⇒ [6, 9, 1, 3, 5.5]
```

```
new_list = ['Argue','Burglar','Parent','Linear','shape']
```

```
max(new_list)
```

```
⇒ 'shape'
```

```
new_list = ['Argue', 'Burglar', 'Parent', 'Linear', 'shape']
```

```
sorted(new_list)
```

```
⇒ ['Argue', 'Burglar', 'Linear', 'Parent', 'shape']
```

```
print(new_list)
```

```
⇒ ['Argue', 'Burglar', 'Parent', 'Linear', 'shape']
```

```
sorted(new_list, reverse=True)
```

```
⇒ ['shape', 'Parent', 'Linear', 'Burglar', 'Argue']
```

```
sorted(new_list)
```

```
⇒ ['Argue', 'Burglar', 'Linear', 'Parent', 'shape']
```

```
new_list
```

```
⇒ ['Argue', 'Burglar', 'Parent', 'Linear', 'shape']
```

[illegible]

```
[1, 2, 3],  
[10, [19, 20], 30]]
```

```
#Print the list
```

```
print(my_list)
```

```
⇒ [1, 2, 3, 1, 1, 1, 3, 10, 5, 8, 'Append me!', 'Append me!', 'Append me!', 'Appen
```

```
my_list.extend(['Wubba", "Lubba', 'Dub Dub'])
```

```
print(my_list)
```

```
⇒ [1, 3, 1, 1, 1, 3, 10, 5, 8, 'Append me!', 'Append me!', 'Append me!', 'Append m
```

```
len(my_list)
```

```
⇒ 22
```

```
#Print the list
```

```
print(my_list)
```

```
⇒ [1, 2, 3, 1, 1, 1, 3, 10, 5, 8, 'Append me!', 'Append me!', 'Append me!', 'Appen
```

```
#Pop off the indexed item
```

```
my_list.pop()
```

```
⇒ 'Dub Dub'
```

```
#Assign the popped element, remember default popped index is -1
```

```
my_list.pop(1)
```

```
⇒ 2
```

```
len(my_list)
```

```
⇒ 22
```

```
print(my_list)
```

```
⇒ [1, 3, 1, 1, 1, 3, 10, 5, 8, 'Append me!', 'Append me!', 'Append me!', 'Append m
```

```
#Print the list
```

```
print(my_list)
```

```
⇒ [1, 3, 1, 1, 1, 3, 10, 5, 8, 'Append me!', 'Append me!', 'Append me!', 'Append m
```

```
my_list.extend(['Wubba', 'Lubba', 'Dub Dub'])
```

```
print(my_list)
```

```
⇒ [1, 3, 1, 1, 1, 3, 10, 5, 8, 'Append me!', 'Append me!', 'Append me!', 'Append m
```

```
len(my_list)
```

```
⇒ 24
```

```
#Print the list
```

```
print(my_list)
```

```
⇒ [1, 3, 1, 1, 1, 3, 10, 5, 8, 'Append me!', 'Append me!', 'Append me!', 'Append m
```

```
#Pop off the indexed item
```

```
my_list.pop()
```

```
⇒ 'Dub Dub'
```

```
#Assign the popped element, remember default popped index is -1
```

```
my_list.pop(1)
```

```
⇒ 3
```

```
len(my_list)
```

```
⇒ 22
```

```
print(my_list)
```

```
⇒ [1, 1, 1, 1, 3, 10, 5, 8, 'Append me!', 'Append me!', 'Append me!', 'Append me!'
```

```
#Use sort to sort the list (this is permanent!)
```

```
new_list.sort()
```

```
print(new_list)
```

```
⇒ ['Argue', 'Burglar', 'Linear', 'Parent', 'shape']
```

```
#Use the reverse boolean to set the ascending or descending order
```

```
new_list.sort(reverse=True)
```

```
print(new_list)
```

```
⇒ ['shape', 'Parent', 'Linear', 'Burglar', 'Argue']
```

```
boolean_list=[True, False]
boolean_list.sort(reverse=True)
print(boolean_list)
```

```
⇒ [True, False]
```

```
my_list = [1, 1, 1, 1, 1.43, 2, 3, 3, 5, 8, 18, 'Lubba', 'Dub Dub']
print(my_list)
```

```
⇒ [1, 1, 1, 1, 1.43, 2, 3, 3, 5, 8, 18, 'Lubba', 'Dub Dub']
```

```
my_list.reverse()
print(my_list)
```

```
⇒ ['Dub Dub', 'Lubba', 18, 8, 5, 3, 3, 2, 1.43, 1, 1, 1, 1]
```

```
#Let's make three lists
```

```
lst_1 = [1,2,3]
lst_2 = ['b','a','d']
lst_3 = [7,8,9]
```

```
#Make a list of lists to form a matrix
list_of_lists = [lst_1,lst_2,lst_3]
print(list_of_lists)
```

```
⇒ [[1, 2, 3], ['b', 'a', 'd'], [7, 8, 9]]
```

```
my_list.reverse()
print(my_list)
```

```
⇒ [1, 1, 1, 1, 1.43, 2, 3, 3, 5, 8, 18, 'Lubba', 'Dub Dub']
```

```
#Show
```

```
type(list_of_lists)
⇒ list
```

```
#Grab first item in matrix object
```

```
list_of_lists[1]
⇒ ['b', 'a', 'd']
```

```
#Grab first item of the first item in the matrix object
```

```
list_of_lists[1]
```

```
⇒ ['b', 'a', 'd']
```