

List

```
In [19]: empty_list = []
int_list = [1,2,3,4,5]
float_list = [1.0, 2.0, 3.0, 4.0, 5.0]
string_list = ["Many words", "impoverished meaning"]
mixed_list = [1, 2.0, "Mix it up"]

print(empty_list)
print(int_list)
print(float_list)
print(string_list)
print(mixed_list)

[]
[1, 2, 3, 4, 5]
[1.0, 2.0, 3.0, 4.0, 5.0]
['Many words', 'impoverished meaning']
[1, 2.0, 'Mix it up']
```

```
In [2]: type(mixed_list)
```

```
Out[2]: list
```

```
In [3]: mixed_list[0], type(mixed_list[0])
```

```
Out[3]: (1, int)
```

```
In [4]: mixed_list[1], type(mixed_list[1])
```

```
Out[4]: (2.0, float)
```

```
In [5]: mixed_list[2], type(mixed_list[2])
```

```
Out[5]: ('Mix it up', str)
```

Concatenate list

```
In [22]: list1 = [4,6,32,6,7,98]
list2 = [1,6,3,7,89,0]

join_lists = list1 + list2

list1
```

```
Out[22]: [4, 6, 32, 6, 7, 98]
```

```
In [7]: join_lists
```

```
Out[7]: [4, 6, 32, 6, 7, 98, 1, 6, 3, 7, 89, 0]
```

```
In [8]: str1 = "Some string"
        str2 = "Another string to concatenate with str1"

        join_strings = str1 + str2
        join_strings
```

```
Out[8]: 'Some stringAnother string to concatenate with str1'
```

List Slice

```
In [9]: join_lists
```

```
Out[9]: [4, 6, 32, 6, 7, 98, 1, 6, 3, 7, 89, 0]
```

```
In [10]: join_lists[:6]
```

```
Out[10]: [4, 6, 32, 6, 7, 98]
```

```
In [11]: join_lists[0:5]
```

```
Out[11]: [4, 6, 32, 6, 7]
```

```
In [12]: join_strings[:6]
```

```
Out[12]: 'Some s'
```

```
In [13]: join_strings[7:]
```

```
Out[13]: 'ringAnother string to concatenate with str1'
```

If you call `lst[-1]`, it will access the last element in the list.

```
In [14]: join_lists[-1], join_strings[-1]
```

```
Out[14]: (0, '1')
```

```
In [15]: join_lists[:-1], join_strings[:-1]
```

```
Out[15]: ([4, 6, 32, 6, 7, 98, 1, 6, 3, 7, 89],
          'Some stringAnother string to concatenate with str')
```

```
In [16]: join_lists[:-5], join_strings[:-5]
```

```
Out[16]: ([4, 6, 32, 6, 7, 98, 1], 'Some stringAnother string to concatenate with')
```