Day 13

List Methods in Python:

What are List Methods?

List methods are built-in functions that work only on lists to:

- add items
- remove items
- change order
- get information

They are used with dot (.) notation.

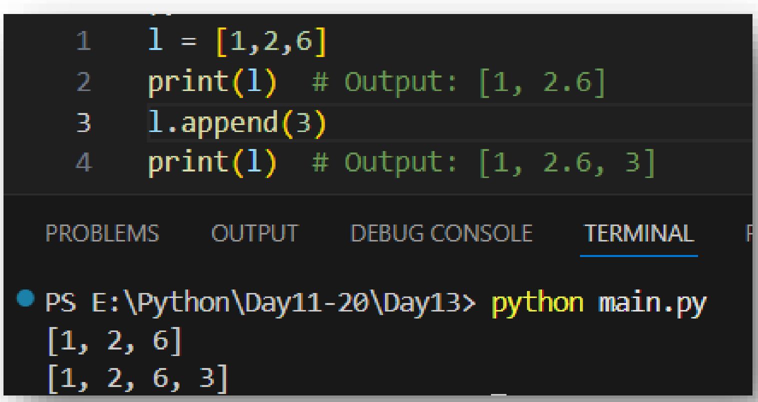
Syntax:

list_name.method()

Important Notes:

- List methods modify the original list
- Most methods return None
- Lists are mutable

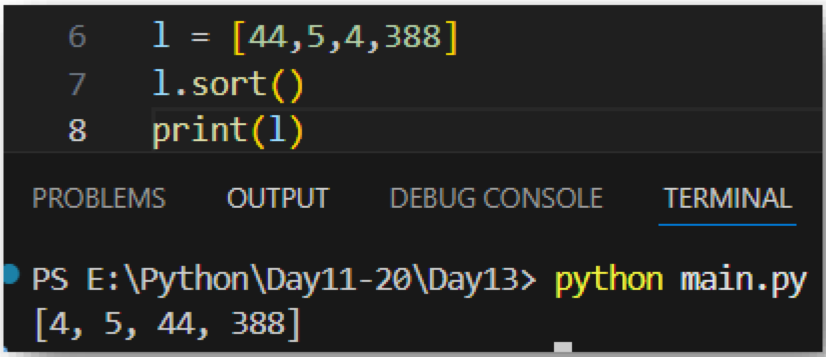
Example: append()



```python
l = [1,2,6]
print(l)  # Output: [1, 2.6]
l.append(3)
print(l)  # Output: [1, 2.6, 3]
```

```
PS E:\Python\Day11-20\Day13> python main.py
[1, 2, 6]
[1, 2, 6, 3]
```

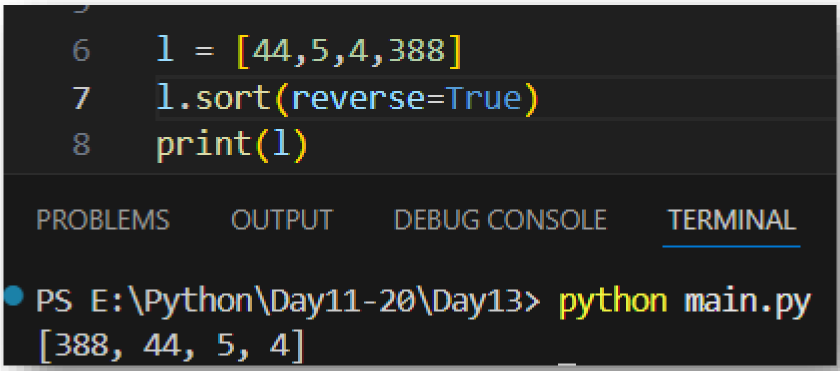
Example: sort()



```python
l = [44,5,4,388]
l.sort()
print(l)
```

```
PS E:\Python\Day11-20\Day13> python main.py
[4, 5, 44, 388]
```

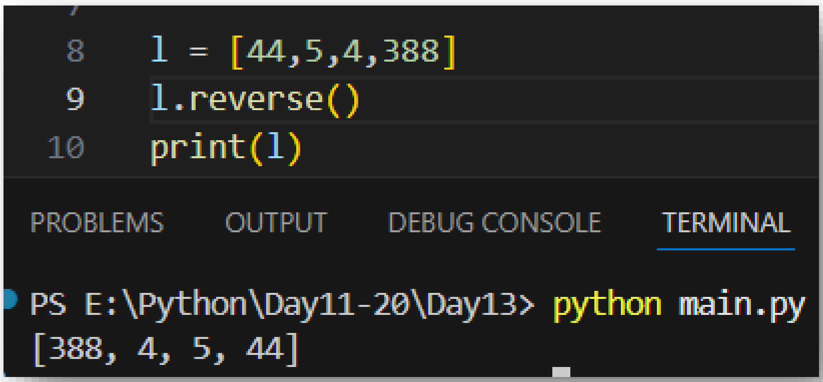
Example: sort(reverse=true)



```python
l = [44,5,4,388]
l.sort(reverse=True)
print(l)
```

```
PS E:\Python\Day11-20\Day13> python main.py
[388, 44, 5, 4]
```

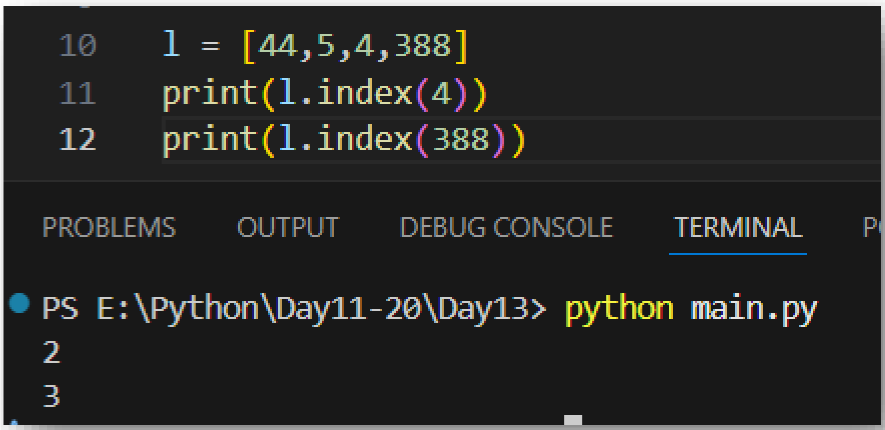
Example: reverse()



```python
l = [44,5,4,388]
l.reverse()
print(l)
```

```
PS E:\Python\Day11-20\Day13> python main.py
[388, 4, 5, 44]
```

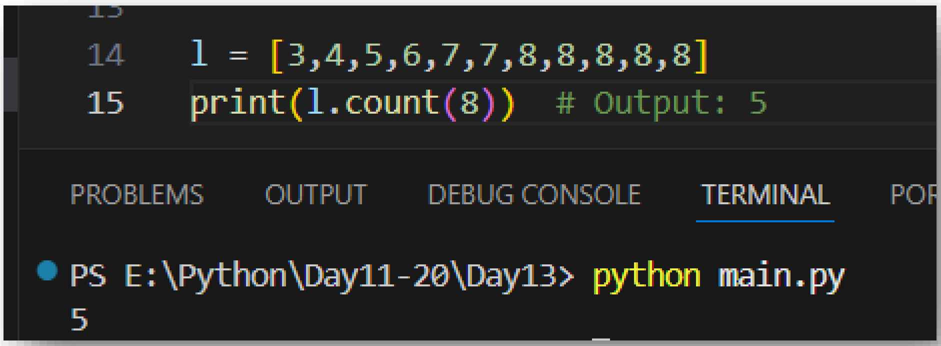
Example: index()



```python
l = [44,5,4,388]
print(l.index(4))
print(l.index(388))
```

```
PS E:\Python\Day11-20\Day13> python main.py
2
3
```

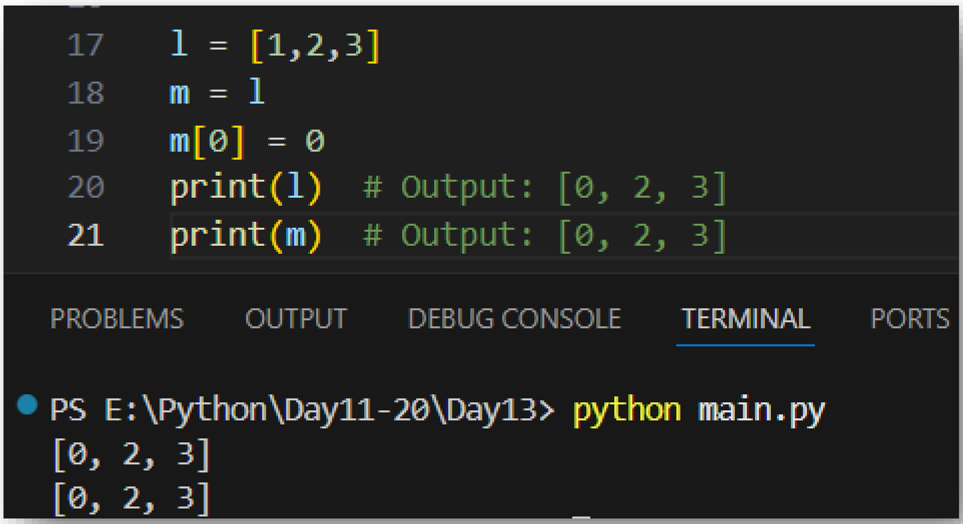
Example: count()



```python
l = [3,4,5,6,7,7,8,8,8,8,8]
print(l.count(8))  # Output: 5
```

```
PS E:\Python\Day11-20\Day13> python main.py
5
```

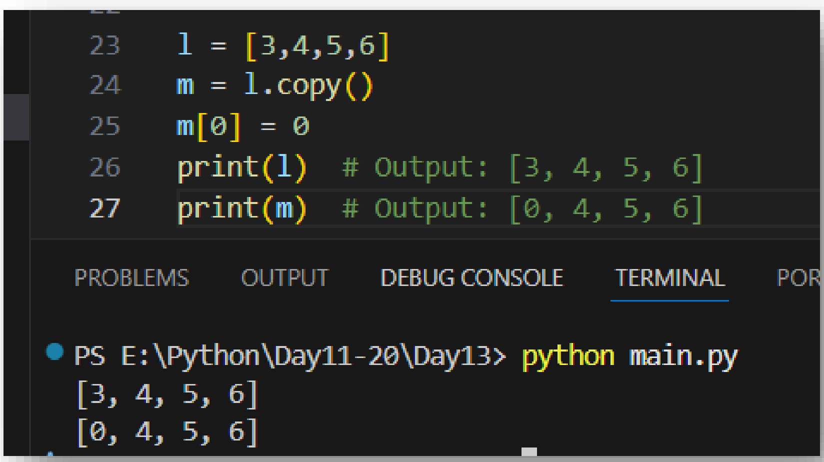
Example: keep in mind that if we store one list in another and then modify the later one then the original one get affected.



```python
l = [1,2,3]
m = l
m[0] = 0
print(l)  # Output: [0, 2, 3]
print(m)  # Output: [0, 2, 3]
```

```
PS E:\Python\Day11-20\Day13> python main.py
[0, 2, 3]
[0, 2, 3]
```

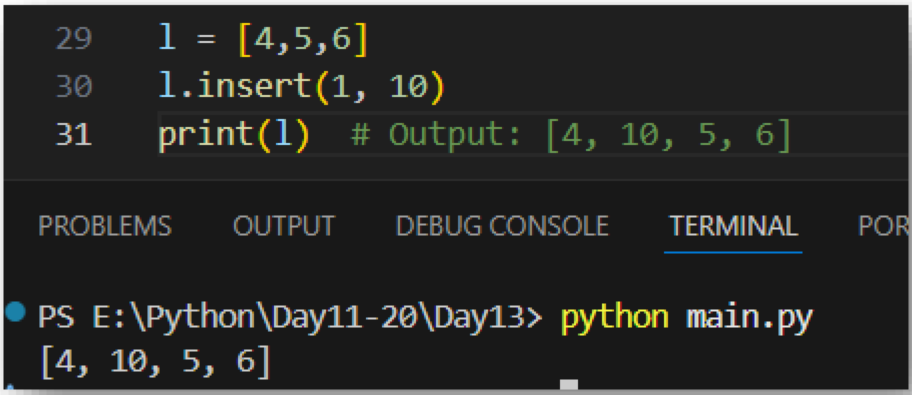
Example: alternative for above is copy(). It is much safer and good way.



```
l = [3,4,5,6]
m = l.copy()
m[0] = 0
print(l)  # Output: [3, 4, 5, 6]
print(m)  # Output: [0, 4, 5, 6]
```

```
PS E:\Python\Day11-20\Day13> python main.py
[3, 4, 5, 6]
[0, 4, 5, 6]
```

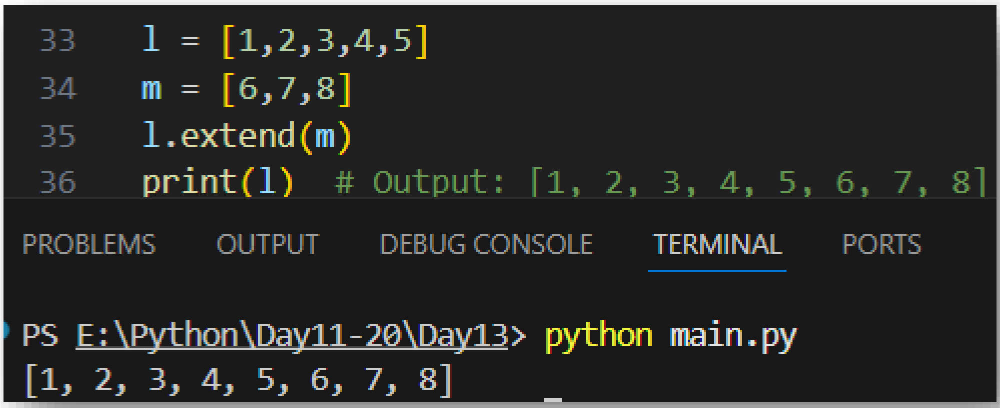
Example: insert(index,value)



```
l = [4,5,6]
l.insert(1, 10)
print(l)  # Output: [4, 10, 5, 6]
```

```
PS E:\Python\Day11-20\Day13> python main.py
[4, 10, 5, 6]
```

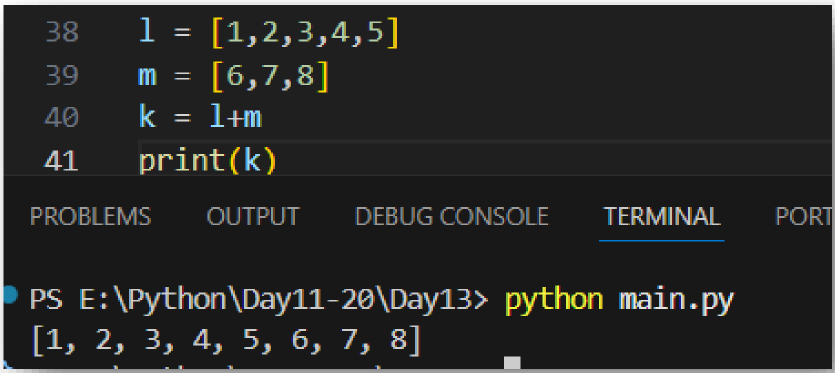
Example: extend()



```
l = [1,2,3,4,5]
m = [6,7,8]
l.extend(m)
print(l)  # Output: [1, 2, 3, 4, 5, 6, 7, 8]
```

```
PS E:\Python\Day11-20\Day13> python main.py
[1, 2, 3, 4, 5, 6, 7, 8]
```

Example: another way to concatenate the list



```python
l = [1,2,3,4,5]
m = [6,7,8]
k = l+m
print(k)
```

```
PS E:\Python\Day11-20\Day13> python main.py
[1, 2, 3, 4, 5, 6, 7, 8]
```

Summary:

- List methods help manage list data
- append, insert, extend → add items
- remove, pop, clear → remove items
- sort, reverse → arrange items
- index, count, copy → get info

--The End--