

Python List – Professional Cheat Sheet

Quick Revision Guide (Beginner → Advanced)

Creating Lists

```
a = []  
a = [1, 2, 3]  
a = list((1, 2, 3))
```

Accessing Elements

```
a[0]  
a[-1]  
a[1:4]  
a[::-1]
```

Adding Elements

```
a.append(5)  
a.insert(1, 10)  
a.extend([6, 7])
```

Removing Elements

```
a.remove(3)  
a.pop()  
del a[0]  
a.clear()
```

Looping

```
for i in a:  
    print(i)  
  
for idx, val in enumerate(a):
```

Sorting & Reversing

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

List Comprehension

```
[x*x for x in range(5)]  
[x for x in a if x % 2 == 0]
```

Copying Lists

```
b = a.copy()  
b = a[:]  
b = a # reference
```

Built-in Functions

```
len(a)  
min(a)  
max(a)  
sum(a)  
any(a)  
all(a)
```

Nested Lists

```
m = [[1,2], [3,4]]  
m[0][1]
```

Time Complexity (Quick View)

Operation	Time Complexity
Access	$O(1)$
Append	$O(1)$
Insert/Delete	$O(n)$
Search	$O(n)$

Designed for GitHub repositories, interviews, backend development, CTFs, and daily revision.