

List (Dynamic Sized Array) Introduction

List

→ Dynamic Size

→ Allows items in different types

```
l = [10, 20, 30, 40, 50]
```

```
print(l)
```

```
print(l[3])
```

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

```
print(l[-2])
```

```
# Example program
```

```
# for list item access
```

Output:

```
[10, 20, 30, 40, 50]
```

```
40
```

```
50
```

```
40
```

```
l = [10, 20, 30, 40, 50]
```

```
l.append(30)
```

```
print(l)
```

```
l.insert(1, 15)
```

```
print(l)
```

```
print(15 in l)
```

```
print(l.count(30))
```

```
print(l.index(30))
```

```
print(l.index(30, 4, 7))
```

```
# Example program
```

```
# for list item insert and search
```

Output:

```
[10,20,30,40,50,30]
```

```
[10,15,20,30,40,50,30]
```

```
True
```

```
2
```

```
3
```

```
6
```

```
l = [10, 20, 30, 40, 50, 60, 70, 80]
```

```
l.remove(20)
```

```
print(l)
```

```
print(l.pop())
```

```
print(l)
```

```
print(l.pop(2))
```

```
print(l)
```

```
del l[1]
```

```
print(l)
```

```
del[0:2]
```

```
print(l)
```

```
# Example program
```

```
# for list item remove
```

Output:

```
[10, 30, 40, 50, 60, 70, 80]
```

```
80
```

```
[10, 30, 40, 50, 60, 70]
```

```
40
```

```
[10, 30, 50, 60, 70]
```

```
[10, 50, 60, 70]
```

```
[60, 70]
```

```
l = [10, 40, 20, 50]
```

```
print(max(l))
```

```
print(min(l))
```

```
print(sum(l))
```

```
l.reverse()
```

```
print(l)
```

```
l.sort()
```

```
print(l)
```

```
# Example program
```

```
# some general purpose function
```

Output:

50

10

120

[50, 20, 40, 10]

[10, 20, 40, 50]