

Listas

```
mylist = ["apple", "banana", "cherry"]
```

```
thislist = ["apple", "banana", "cherry"]  
print(thislist)
```

Permite dados repetidos

```
thislist = ["apple", "banana", "cherry", "apple", "cherry"]  
print(thislist)
```

Lista tamanho (Length)

```
thislist = ["apple", "banana", "cherry"]  
print(len(thislist))
```

List Items - Data Types

```
list1 = ["apple", "banana", "cherry"]  
list2 = [1, 5, 7, 9, 3]  
list3 = [True, False, False]
```

Acessar um item

```
thislist = ["apple", "banana", "cherry"]  
print(thislist[1])
```

Range (intervalo)

```
thislist = ["apple", "banana", "cherry", "orange", "kiwi", "melon", "mango"]  
print(thislist[2:5])
```

Verificar a existencia de um item

```
thislist = ["apple", "banana", "cherry"]  
if "apple" in thislist:  
    print("Yes, 'apple' is in the fruits list")
```

Alterar um valor

```
thislist = ["apple", "banana", "cherry"]  
thislist[1] = "blackcurrant"  
print(thislist)
```

inserir valores no final da lista

```
thislist = ["apple", "banana", "cherry"]  
thislist.append("orange")  
print(thislist)
```

inserir valores na posição

```
thislist = ["apple", "banana", "cherry"]  
thislist.insert(1, "orange")  
print(thislist)
```

inserir uma lista na outra

```
thislist = ["apple", "banana", "cherry"]  
tropical = ["mango", "pineapple", "papaya"]  
thislist.extend(tropical)  
print(thislist)
```

remover um item específico

```
thislist = ["apple", "banana", "cherry"]  
thislist.remove("banana")  
print(thislist)
```

remover (índice)

```
thislist = ["apple", "banana", "cherry"]  
thislist.pop(1)  
print(thislist)
```

remover o último

```
thislist = ["apple", "banana", "cherry"]  
thislist.pop()  
print(thislist)
```

remover um item específico (outro comando)

```
thislist = ["apple", "banana", "cherry"]  
del thislist[0]  
print(thislist)
```

remover a lista

```
thislist = ["apple", "banana", "cherry"]  
del thislist
```

limpar a lista

```
thislist = ["apple", "banana", "cherry"]  
thislist.clear()  
print(thislist)
```

loop na lista

```
thislist = ["apple", "banana", "cherry"]  
for x in thislist:  
    print(x)
```

loop via índice

```
thislist = ["apple", "banana", "cherry"]  
for i in range(len(thislist)):  
    print(thislist[i])
```

loop utilizando o While

```
thislist = ["apple", "banana", "cherry"]
i = 0
while i < len(thislist):
    print(thislist[i])
    i = i + 1
```

Organizar a lista

```
thislist = ["orange", "mango", "kiwi", "pineapple", "banana"]
thislist.sort()
print(thislist)
```

ordem inversa

```
thislist = ["orange", "mango", "kiwi", "pineapple", "banana"]
thislist.sort(reverse = True)
print(thislist)
```

copiar a lista

```
thislist = ["apple", "banana", "cherry"]
mylist = thislist.copy()
print(mylist)
```

ou

```
thislist = ["apple", "banana", "cherry"]
mylist = list(thislist)
print(mylist)
```

juntar duas listas

```
-----
list1 = ["a", "b", "c"]
list2 = [1, 2, 3]
list3 = list1 + list2
print(list3)
```

```
list1 = ["a", "b", "c"]
list2 = [1, 2, 3]
for x in list2:
    list1.append(x)
print(list1)
```

```
list1 = ["a", "b", "c"]
list2 = [1, 2, 3]
list1.extend(list2)
print(list1)
```

soma dos valores de uma lista

```
-----
list1 = [1, 2, 3]
list2 = [1, 2, 3]
list3 = []
for i in range(len(list1)):
    list3.append(list1[i]+list2[i])
print(list3)
```

Exercícios:

1. imprima o segundo elemento da lista

```
fruits = ["apple", "banana", "cherry"]
```

2. Altere o valor de "apple" para "kiwi", na lista de frutas.

```
fruits = ["apple", "banana", "cherry"]
```

3. Use o método append para adicionar "orange" à lista de frutas.

```
fruits = ["apple", "banana", "cherry"]
```

4. Use o método de insert para adicionar "lemon" como o segundo item na lista de frutas.

```
fruits = ["apple", "banana", "cherry"]
```

5. Use o método remove para remover "banana" da lista de frutas.

```
fruits = ["apple", "banana", "cherry"]
```

6. use um intervalo(range) de índices para imprimir o terceiro, quarto e quinto item da lista.

```
fruits = ["apple", "banana", "cherry", "orange", "kiwi", "melon", "mango"]
```

7. imprima a quantidade de itens da lista

```
fruits = ["apple", "banana", "cherry"]
```