

python 从入门到实践 ch4纵列表

在 [1] ...

```
vaes = ['vae', 'cvae', 'vq-vae']
for vae in vaes:
    print(vae)
```

vae
cvae
vq-vae

在 [2] ...

```
for vae in vaes:
    print(f'{vae.title()},that is a graet show!')
```

Vae,that is a graet show!
Cvae,that is a graet show!
Vq-Vae,that is a graet show!

在 [3] ...

```
for vae in vaes:
    print(f'{vae.title()},that is a graet show!')
print('Thank you everyone so good!')
```

Vae,that is a graet show!
Cvae,that is a graet show!
Vq-Vae,that is a graet show!
Thank you everyone so good!

在 [4] ...

```
for value in range(1,5):
    print(value)
```

1
2
3
4

在 [5] ...

```
for value in range(6):
    print(value)
```

0
1
2
3
4
5

在 [6] ...

```
numbers = list(range(6))
print(numbers)
```

[0, 1, 2, 3, 4, 5]

在 [7] ...

```
even_numbers = list(range(2,11,2)) # 含最后一个数值
print(even_numbers)
```

[2, 4, 6, 8, 10]

在[8]中:

```
squares = []
for value in range(1,5):
    square = value**2
    squares.append(square) # 但意思更明确、清晰
print(squares)
```

[1, 4, 9, 16]

```
在 [9] ... # 简洁
squares = []
for value in range(1,5):
    squares.append(value**2)
print(squares)
```

[1, 4, 9, 16]

```
在 [10]... list = [1,2,3,4,5,6,7,8,9,0]
min(list),max(list),sum(list)    # 简便计算
```

出[10]: (0, 9, 45)

```
在[11]中... # 大大大大大武器-----列表推导式
squares = [value**2 for value in range(1,5)]
print(squares)
```

[1, 4, 9, 16]

```
在[17]中... print(squares[0:3]) # 第一个到第三个
print(squares[1:4]) # 第二个到第四个
print(squares[2:]) # 第三个（含）开始
print(squares[:-2]) # 倒数第二个（不含）前面的
print(squares[-2:]) # 最后两个
```

[1, 4, 9]

[4, 9, 16]

[9, 16]

[1, 4]

[9, 16]

```
在[20]中... tasks = ['CET-6','python','pytorch']
print('Here are the core tasks in my list:')
for task in tasks[1:]:
    print(f'I love practicing {task.title()} on my screen!')
```

Here are the core tasks in my list:

I love practicing Python on my screen!

I love practicing Pytorch on my screen!

```
在[21]中... my_drinks = ['tea','cola','coffee'] # 复制副本
friends_drinks = my_drinks[:]
```

```
print(my_drinks)
print(friends_drinks)
```

```
my_drinks.append('milk')
friends_drinks.append('water')
```

```
print(my_drinks)
print(friends_drinks)
```

['tea', 'cola', 'coffee']

['tea', 'cola', 'coffee']

['tea', 'cola', 'coffee', 'milk']

['tea', 'cola', 'coffee', 'water']

```
在[22]中... # 复制达咩的操作！
my_drinks = ['tea','cola','coffee']
friends_drinks = my_drinks
```

```

print(my_drinks)
print(friends_drinks)

my_drinks.append('milk')
friends_drinks.append('water')

print(my_drinks)
print(friends_drinks)  # 二者 存储都指向同一地址

```

```

['tea', 'cola', 'coffee']
['tea', 'cola', 'coffee']
['tea', 'cola', 'coffee', 'milk', 'water']
['tea', 'cola', 'coffee', 'milk', 'water']

```

在[27]中...

```

# 元组
math_tuple = (3.14,2.8)
print(math_tuple)
print(math_tuple[0])
print(math_tuple[1])
# math_tuple[0] = 9 元组不支持修改 会报错
# TypeError: 'tuple' object does not support item assignment

```

```

(3.14, 2.8)
3.14
2.8

```

UsageError: Line magic function `%` not found.

在[28]中...

```

# 但可以重新定义元组
math_tuple = (3.14,2.8)
print(math_tuple)
math_tuple = (1,2)
print(math_tuple) # 很可以 不报错!

```

```

(3.14, 2.8)
(1, 2)

```

在 [] ...