

Filter () function in Python

How is the filter () function syntax, what parameters and how does it work? Invites you to read the track.

Python's filter () function filters out elements according to the condition of the function func from list, dict . This function will only return the values ??that the condition in the func accepts (ie True). How is the filter () function syntax, what parameters and how does it work? Invites you to read the track.

Syntax of filter () function in Python

```
filter(func, iterable)
```

Parameters of filter function ()

The filter () function has 2 parameters:

1. *func*: is a conditional function to check whether the elements in *iterable* are true or false, *func* can only return True or False.
2. *iterable*: is iterable to filter, can be set, list, tuple or container.

Example: How does the filter () function work?

```
# danh sách ch? cái
alphabet = ['a', 'b', 'd', 'e', 'i', 'j', 'o']

# l?c nguyên âm
# vi?t b?i TipsMake.com
def filterNguyenam(alphabet):
    nguyenam = ['a', 'e', 'i', 'o', 'u']

    if(alphabet in nguyenam):
        return True
    else:
        return False

filterNguyenam = filter(filterNguyenam, alphabet)

print('Các nguyên âm ???c l?c là:')
for nguyenam in filterNguyenam:
    print(nguyenam)
```

Run the program, the result is:

```
Các nguyên âm ???c l?c là:  
a  
e  
i  
o
```

Here, we list a list of letters and need to filter out vowels in it.

You can use a for loop to test each component in the list and store it to another list, but using Python the process will be easier and faster by using the filter method ().

Example 2: filter () works without func.

```
# random list  
# vi?t b?i TipsMake.com  
randomList = [1, 'a', 0, False, True, '0']  
  
filteredList = filter(None, randomList)  
  
print('Các ph?n t? ???c l?c là:')  
for element in filteredList:  
    print(element)
```

Run the program, the result is:

```
Các ph?n t? ???c l?c là:  
1  
a  
True  
0
```

Here, we have a random list of numbers, strings and boolean called randomList. We pass randomList to the filter () function with the first parameter (func) being None. At this point, the function itself becomes Identity function by default, so we get TRUE elements 1, a, True and '0' ('0' in string form).

Previous article: [Function hasattr \(\) in Python](#)

Next lesson: [int \(\) function in Python](#)

You finished reading the article "**Filter () function in Python**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.