filter()

The filter() function returns an iterator were the items are filtered through a function to test if the item is accepted or not.

Python filter() function is used to get filtered elements. This function takes two arguments, first is a function and the second is iterable. The filter function returns a sequence from those elements of iterable for which function returns True.

The first argument can be None if the function is not available and returns only elements that are True.

Signature

filter (function, iterable)

Parameters

function: It is a function. If set to None returns only elements that are True.

Iterable: Any iterable sequence like list, tuple, and string.

Syntax

filter(*function*, *iterable*)

Parameter Values

|  |  |
| --- | --- |
| **Parameter** | **Description** |
| *function* | A Function to be run for each item in the iterable |
| *iterable* | The iterable to be filtered |

### Example

Filter the array, and return a new array with only the values equal to or above 18:

ages = [5, 12, 17, 18, 24, 32]  
  
def myFunc(x):  
  if x < 18:  
    return False  
  else:  
    return True  
  
adults = filter(myFunc, ages)  
  
for x in adults:  
  print(x)

Filter function on dictionary

Ex:

Get people whose age is more than 18

ages={'smith':19,'john':21,'alice':12,'james':18,'david':13}

def get(n):

if n>=18:

return True

else:

return False

voters=filter(get,ages.values())

print(list(voters))

o/p:

[19, 21, 18]

Ex: