



Your Validating Email Addresses With a Filter submission got 20.00 points.

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Validating Email Addresses With a Filter

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Problem

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You are given an integer N followed by N email addresses. Your task is to print a list containing only *valid* email addresses in lexicographical order.

Valid email addresses must follow these rules:

- It must have the *username@websitename.extension* format type.
- The username can only contain letters, digits, dashes and underscores.
- The website name can only have letters and digits.
- The maximum length of the extension is **3**.

Concept

A *filter* takes a function returning *True* or *False* and applies it to a sequence, returning a list of only those members of the sequence where the function returned *True*. A *Lambda* function can be used with filters.

Let's say you have to make a list of the squares of integers from **0** to **9** (both included).

```
>> l = list(range(10))
>> l = list(map(lambda x:x*x, l))
```

Now, you only require those elements that are greater than **10** but less than **80**.

```
>> l = list(filter(lambda x: x > 10 and x < 80, l))
```

Easy, isn't it?

Input Format

The first line of input is the integer N , the number of email addresses.

N lines follow, each containing a string.

Constraints

Each line is a non-empty string.

Output Format

Output a list containing the valid email addresses in lexicographical order. If the list is empty, just output an empty list, [].

Sample Input

3
lara@hackerrank.com
brian-23@hackerrank.com
britts_54@hackerrank.com

Sample Output

```
['brian-23@hackerrank.com', 'britts_54@hackerrank.com', 'lara@hackerrank.com']
```

f t in

Submissions: [8057](#)

Max Score: 20

Difficulty: Medium

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Python 3



```
1 def fun(s):  
2     # return True if s is a valid email, else return False  
3     import re  
4     a = re.match(r'[a-zA-Z0-9_-]+@[a-zA-Z0-9]+\.[a-zA-Z]{1,3}$', s)  
5     return bool(a)
```

```
7 def filter_mail(emails):  
8     return list(filter(fun, emails))  
9  
10 if __name__ == '__main__':  
11     n = int(input())  
12     emails = []  
13     for _ in range(n):  
14         emails.append(input())  
15  
16 filtered_emails = filter_mail(emails)  
17 filtered_emails.sort()  
18 print(filtered_emails)
```

Line: 4 Col: 10

Upload Code as File ☐ Test against custom input

Run Code

Submit Code

Congrats, you solved this challenge!

Challenge your friends: f t in

✓ Test Case #0
✓ Test Case #3
✓ Test Case #6
✓ Test Case #9

✓ Test Case #1
✓ Test Case #4
✓ Test Case #7

✓ Test Case #2
✓ Test Case #5
✓ Test Case #8

You've earned 20.00 points.

Next Challenge