Collections.deque()

59/115 challenges solved

Rank: 77263 | Points: 885

Problem Submissions Leaderboard Editorial

collections.deque()

A deque is a double-ended queue. It can be used to add or remove elements from both ends.

Deques support thread safe, memory efficient appends and pops from either side of the deque with approximately the same $O(1)$ performance in either direction.

Click on the link to learn more about **deque() methods**.

Click on the link to learn more about various approaches to working with deques: **Deque Recipes**.

Example

Code

```
>>> from collections import deque
>>> d = deque()
>>> d.append(1)
>>> print d
deque([1])
>>> d.appendleft(2)
>>> print d
deque([2, 1])
>>> d.clear()
>>> print d
deque([])
>>> d.extend('1')
>>> print d
deque(['1'])
>>> d.extendleft('234')
>>> print d
deque(['4', '3', '2', '1'])
>>> d.count('1')
1
>>> d.pop()
'1'
>>> print d
deque(['4', '3', '2'])
>>> d.popleft()
'4'
>>> print d
deque(['3', '2'])
>>> d.extend('7896')
>>> print d
deque(['3', '2', '7', '8', '9', '6'])
>>> d.remove('2')
>>> print d
deque(['3', '7', '8', '9', '6'])
>>> d.reverse()
>>> print d
deque(['6', '9', '8', '7', '3'])
>>> d.rotate(3)
>>> print d
deque(['8', '7', '3', '6', '9'])
```

Task

Perform append, pop, popleft and appendleft methods on an empty deque d.

Input Format

The first line contains an integer N, the number of operations.

The next N lines contains the space separated names of methods and their values.

Constraints

$0 < N \leq 100$

Output Format

Print the space separated elements of deque d.

Sample Input

```
6
append 1
append 2
append 3
appendleft 4
pop
popleft
```

Sample Output

```
1 2
```

Change Theme Language Python 3

```
# Enter your code here. Read input from STDIN. Print output to STDOUT
from collections import deque


N = int(input())
d = deque()
for _ in range(N):
    name_para = input().split()
    if len(name_para) == 1:
        getattr(d, name_para[0])()
    if len(name_para) == 2:
        getattr(d, name_para[0])(int(name_para[1]))
print(*d)

```

EMACS Line: 14 Col: 1

Upload Code as File | Test against custom input | Run Code | Submit Code

Test case 0

Test case 1

Test case 2

Test case 3

Test case 4

Test case 5

Compiler Message

Success

Input (stdin) Download

```
6
append 1
append 2
append 3
appendleft 4
pop
popleft
```

Expected Output Download