

X

Minimum Time Required ☆

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You are planning production for an order. You have a number of machines that each have a fixed number of days to produce an item. Given that all the machines operate simultaneously, determine the minimum number of days to produce the required order.

For example, you have to produce goal = 10 items. You have three machines that take machines = [2, 3, 2] days to produce an item. The following is a schedule of items produced:

Day	/ Production	Count
2	2	2
3	1	3
4	2	5
6	3	8
0	2	1.0

It takes **8** days to produce **10** items using these machines.

Function Description

Complete the minimumTime function in the editor below. It should return an integer representing the minimum number of days required to complete the order. minimumTime has the following parameter(s):

- machines: an array of integers representing days to produce one item per machine
- goal: an integer, the number of items required to complete the order

Input Format

The first line consist of two integers n and goal, the size of machines and the target production.

The next line contains n space-separated integers, machines[i].

Constraints

- $1 \le n \le 10^5$
- $1 \leq goal \leq 10^9$
- $1 \leq machines[i] \leq 10^9$

Output Format

Return the minimum time required to produce goal items considering all machines work simultaneously.

Sample Input 0

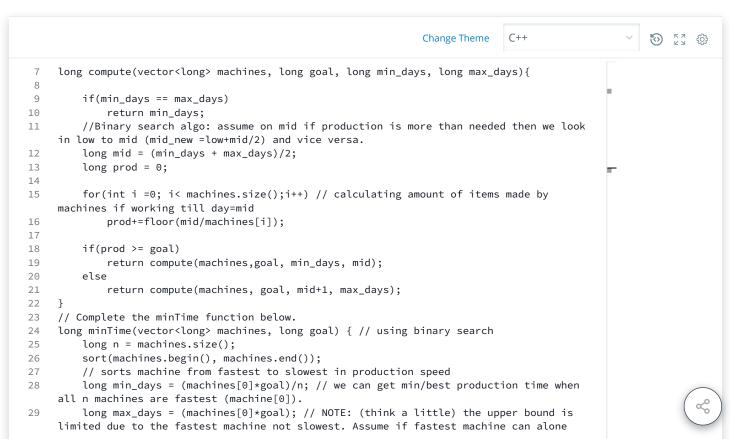
- 2 5
- 2 3

Sample Output 0

6



```
Explanation 0
In m{6} days m{machine_0} can produce m{3} items and m{machine_1} can produce m{2} items. This totals up to m{5}.
Sample Input 1
  3 10
  1 3 4
Sample Output 1
  7
Explanation 1
In 7 minutes, machine_0 can produce 7 items, machine_1 can produce 2 items and machine_2 can produce 1 item, which totals up to 10.
Sample Input 2
  3 12
   4 5 6
Sample Output 2
  20
Explanation 2
In oxed{20} days oxed{machine}[0] can produce oxed{5} items, oxed{machine}[1] can produce oxed{4}, and oxed{machine}[2] can produce oxed{3}.
```



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            complete goal in x days, in those x days other slower machines produces something. This implies goal was actually achieved before the xth day. Therefore, we can say that upper
            bound is single fastest machine.
      30
      31
                if(machines.size()==1) // if there is only 1 machine, it will time*goal= max_days
                     return max_days;
      32
      33
      34
                return compute(machines, goal, min_days, max_days);
      35
           }
                                                                                                                        Line: 22 Col: 2
     1 Upload Code as File
                         ☐ Test against custom input
                                                                                                                       Submit Code
                                                                                                        Run Code
      Congratulations
                                                                                                                Next Challenge
      You solved this challenge. Would you like to challenge your friends?
      ⊘ Test case 0
                                  Compiler Message
                                   Success
      ⊘ Test case 1
                                  Input (stdin)
                                                                                                                           Download
      1 2 5
                                       2 3
      Expected Output
                                                                                                                           Download
      ⊘ Test case 5 △
```

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