

Online 3 Set A

You need to **completely** fill a **M** meter long cargo with boxes. There are **n** types of boxes there: the **i**-th type has length **L_i**. You have an unlimited number of boxes available. What is the minimum number of boxes you need to fill the **M** meter long cargo such that no space is left in the cargo? Assume the width and height of all boxes and cargos are 1 meter.

- A. Take the list of n types of boxes and M as input.
- B. Write a program for the above scenario using a DP algorithm.

M meter long cargo

L₁ meter long box

L₂ meter long box

....

L_n meter long box

The width is 1 meter and height 1 meter for all boxes and cargo.

Sample Input	Sample output
n L_1, L_2, \dots, L_n M	
5 1 23 25 12 10 46	minimum 2 boxes. 23 meter 23 meter