

Q3 (10 marks) A straight walkway, 1-metre wide, is to be covered by tiles. There are  $k$  sizes of tile, all is 1-metre wide. Find the minimum number of tiles required to cover the length  $L$  of the walkway.

NOTE The tile of length 1 metre is always an available size.

**INPUT**

Line 1 : the list of  $k$  tile lengths,  $k \leq 5$

Line 2 : the length  $L$  of the walkway,  $L \leq 1000$

**OUTPUT**

The minimum number of tiles that covers the length  $L$

**EXAMPLE**

INPUT	OUTPUT
1 2 5 10 16	3
1 83 127 189 234 967	6