Problem K. Mark and Toys

OS Linux

Mark and Jane are very happy after having their first child. Their son loves toys, so Mark wants to buy some. There are a number of different toys lying in front of him, tagged with their prices. Mark has only a certain amount to spend, and he wants to maximize the number of toys he buys with this money. Given a list of toy prices and an amount to spend, determine the maximum number of gifts he can buy.

Note Each toy can be purchased only once.

Example
$prices = [1, 2, 3, 4]$
$k = 7$

The budget is 7 units of currency. He can buy items that cost $[1, 2, 3]$ for 6, or $[3, 4]$ for 7 units. The maximum is 3 items.

Function Description

Complete the function *maximumToys* in the editor below.

maximumToys has the following parameter(s):

- *int prices[n]:* the toy prices
- *int k:* Mark's budget

Returns

- *int:* the maximum number of toys

Input Format

The first line contains two integers, n and k, the number of priced toys and the amount Mark has to spend.
The next line contains n space-separated integers $prices[i]$

Constraints

$1 \leq n \leq 10^5$
$1 \leq k \leq 10^9$
$1 \leq prices[i] \leq 10^9$
A toy can't be bought multiple times.

Input	Output
7 50 1 12 5 111 200 1000 10	4

Explanation

He can buy only 4 toys at most. These toys have the following prices: $1, 12, 5, 10$.