Mark and Toys ★

Problem Submissions Leaderboard Editorial Topics

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.

Sample Input

```
7 50
1 12 5 111 200 1000 10
```

Sample Output

```
4
```

Explanation

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

Change Theme JavaScript (Node.js)

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```
function readLine() {
    return inputString[currentLine++];
}

// Complete the maximumToys function below.
function maximumToys(prices, k) {
let counter = 0
  let sorted = [...prices].sort((a, b) => {
    return a - b
  })
  sorted.forEach(price => {
    if (price <= k) {
      k -= price
      counter++
    }
  })
  return counter
}

function main() {
    const ws = fs.createWriteStream(process.env.OUTPUT_PATH);

    const nk = readLine().split(' ');
```

Line: 39 Col: 17

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

Congratulations!

You have passed the sample test cases. Click the submit button to run your code against all the test cases.

- Sample Test case 0
- Sample Test case 1
- Sample Test case 2

Input (stdin) Download

```
7 50
1 12 5 111 200 1000 10
```

Your Output (stdout)

```
4
```

Expected Output Download

```
4
```