

Pokemon League

ZPRAC-16-17-Lab11

Pokemon League

[40 Marks]

ANNOUNCEMENT:

10% marks will be allotted for using dynamic memory allocation (using malloc)

Up to 20% marks will be allotted for good programming practice. These include

- Comments for non trivial code
 - Indentation: align your code properly
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Red has N pokemons with power levels $P=[p_1, p_2, \dots, p_N]$. Red wants to enter a pokemon contest and he must choose X numbers of pokemons from the N pokemons that he got. The contest has a rule that the cumulative power level of all the X pokemons chosen must be less than or equal to Y . Help Red maximize X .

Constraints::

$$1 \leq N \leq 10^5$$

$$1 \leq Y \leq 10^9$$

$$1 \leq \text{PowerLevel of any pokemon} \leq 10^9$$

Input Format::

First line contains two space separated integers, N and Y

Second line contains N space separated integers indicating the power level of each pokemon

Output Format::

Print the maximum number of pokemons that Red can choose for the contest.

Example::

Input--

7 50

1 12 5 111 200 1000 10

Output--

4

Explanation:

He can choose only 4 pokemons at most. These pokemons have the following power levels:
1,12,5,10.