

Pay the least

ZPRAC-16-17-Lab11

Pay the least

[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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There are N items, each of them costing 1 unit of money. Their weights are given by an array $W=[w_1, w_2, w_3, \dots, w_N]$. If you buy one item of weight X , you get all the remaining items of weight in the range of X to $X+4$ (inclusive) for free.

What is the minimum amount of money that must be spent to buy all items?

Constraints::

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

Input Format::

First line contains one integer N , denoting the number of items.

Second line contains N space separated integers w_1, w_2, \dots, w_N representing the weights of each item.

Output Format::

print the minimum amount of money that must be spent to buy all items.

Example::

Input--

5
1 2 3 17 10

Output--

3

Explanation:

- 1) First buy the item of weight 1 and You get the items of weight 2 and 3 respectively for free.
- 2) Buy item of weight 17.
- 3) Buy item of weight 10.