Task: ZAP
Panini

XXIV OI, Stage III, Day one. Source file `zap.*` Available memory: 256 MB. *11.04.2017*

Byteasar runs a world-famous panini store, known for its products quality and unique flavor. Over the years, he attained a stable market position and a group of patrons.

Everyday, k customers come to his store, the i-th one arriving at time t_i. Every customer orders a single panino. Byteasar would love to serve each of his loyal customers immediately, but unfortunately this is not possible: He can grill at most z panini in a single batch, and the grilling process takes exactly d units of time. Needles to say, the grilling cannot be paused, stopped, or interfered with in any way (e.g., to add or remove a panino), as this would spoil the amazing taste. Thus, Byteasar will settle for minimizing the total service time of his patrons, i.e., the total time they have to wait for their orders. Byteasar knows his customers so well that he knows their arrival times and favorite panini, so he may start grilling them in advance, before a customer arrives. However, no customer's order may be ready before they arrive, as no one likes a cold panino! Byteasar shows up at his store at time 0.

What is the minimum total service / waiting time of the customers?

Input

The first line of the standard input contains three positive integers k, z and d, which specify the number of customers, the grill capacity, and the grilling duration respectively. In the second line, there is a sequence of k integers $t_1, t_2, \ldots, t_k$ $(0 \leq t_1 \leq t_2 \leq \ldots \leq t_k)$; the number t_i is the arrival time of the i-th customer.

Output

Exactly one integer should be printed to the standard output – the total service / waiting time of the customers in the optimum grilling schedule.

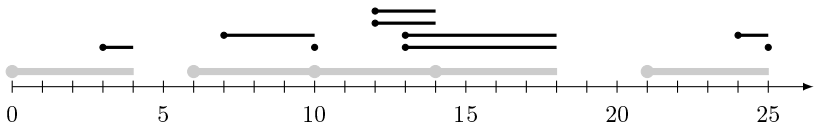
Example

For the input data:

```
9 2 4
3 7 10 12 12 13 13 24 25
```

the correct result is:

```
19
```



Explanation for the example: In the optimal grilling schedule (depicted in the figure), Byteasar starts grilling at times 0, 6, 10, 14 and 21. The first time he grills but a single panino, grilling two at once ever since. The grilling time is marked in gray, whereas the waiting time in black.

Sample grading tests:

`1ocen:` $k = z = 10$, $d = 1$, all customers arrive at time 0;

`2ocen:` $k = 2000$, $z = 5$, $d = 200$, customers arrive spaced apart by at least d units of time;

`3ocen:` $k = 3000$, $z = 7$, $d = 1\,000\,000$, half of customers arrive at time 0, the other half at times $t_{\frac{k}{2}+i} = i$.

Grading

The set of tests consists of the following subsets. Within each subset, there may be several test groups.

Subset	Property	Score
1	$z \leq k \leq 200$; $d \leq 200$; $t_k \leq 10\,000$	20
2	$z \leq k \leq 200$; $d, t_k \leq 1\,000\,000$	30
3	$z \leq k \leq 3000$; $d, t_k \leq 1\,000\,000$	50