Exercising (Hard Version)

Time Limit: 1 Second
Memory Limit: 256 MB

If you have seen the normal version of this problem, the only difference between the two versions is that there is stricter constraints on his exercising schedule.

LetianPie found that his weight is getting higher and higher even though he has been walking 2 miles per day. Therefore, he decides to do outdoor workouts in the morning to lose weight. To consistently lose weight, LetianPie decides to follow the suggestions of a kinesiologist he saw on YouTube. Specifically, the time interval between two workouts should not be less than t_1 hours to recover from the workout, and should not be greater than t_2 hours to maintain the stamina.

Annoyingly, Champaign-Urbana area rains and snows a lot, and the temperature is extremely low on most winter days, making it very uncomfortable to run outside. For the next n hours, LetianPie has assigned each of them a value a_i representing how comfortable it is to do outdoor exercises based on weather and temperature, and he wants to know the maximum total comfort value he can obtain by choosing his exercising schedule optimally while losing weight consistently. The total comfort value he gains from exercising is the sum of comfort values assigned to the time slots he goes jogging. More formally, the total comfort value is $\sum_{h \in H} a_h$, where H is the set of time slots LetianPie goes jogging. You can assume that the comfort values before the first hour and after the n-th hour are all 0.

Input

The first line of input contains three integer n, t_1, t_2 ($1 \leq t_1 \leq t_2 \leq n \leq 5 \times 10^5$) - number of hours, the minimum and maximum time interval between two workouts.

The second line contains n integers $a_1, \ldots, a_n$ ($|a_i| \leq 10^5$) - the comfort value for each hour.

Output

Output a single integer denoting the maximum total comfort value if LetianPie chooses the exercising schedule optimally with respect to the constraints.

Sample Inputs

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5 1 2
-3 -2 1 -4 5
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Sample Outputs

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4
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