C. George and Job

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

The new ITone 6 has been released recently and George got really keen to buy it. Unfortunately, he didn't have enough money, so George was going to work as a programmer. Now he faced the following problem at the work.

Given a sequence of n integers $p_1, p_2, ..., p_n$. You are to choose k pairs of integers:

$$[l_1, r_1], [l_2, r_2], ..., [l_k, r_k] \ (1 \le l_1 \le r_1 < l_2 \le r_2 < ... < l_k \le r_k \le n; \ r_i - l_i + 1 = m),$$

in such a way that the value of sum is maximal possible. Help George to cope with the task.

Input

The first line contains three integers n, m and k $(1 \le (m \times k) \le n \le 5000)$. The second line contains n integers $p_1, p_2, ..., p_n$ $(0 \le p_i \le 10^9)$.

Output

Print an integer in a single line — the maximum possible value of sum.

Examples

input
5 2 1 1 2 3 4 5
output
9

input
7 1 3 2 10 7 18 5 33 0
output
61