

Problem G. The Witchwood

Input file: standard input
Output file: standard output

Shenyang's night fair culture is developed very well. Every time Bob comes to Shenyang, he will definitely go to a night fair called *The Witchwood*. There are n snack stalls in *The Witchwood*, the i th of which gives him a_i pleasure.

Bob's stomach allows him to eat k snack stalls at most. So Bob wants to know the maximum pleasure he can get after visiting the night market.

Input

The first line of input contains two integers n ($1 \leq n \leq 1000$) and k ($1 \leq k \leq n$), indicating the number of snack stalls and the capacity of Bob's stomach.

The second line of input contains n integers a_1, a_2, \dots, a_n ($1 \leq a_i \leq 10^9$), the i th of which indicates the pleasure of the i th snack stall.

Output

Print one integer denoting the maximum pleasure Bob can get.

Example

standard input	standard output
5 2 9 8 10 2 4	19