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 ith 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 ($1 \le n \le 1000$) and k ($1 \le k \le n$), indicating the number of snack stalls and the capacity of Bob's stomach.

The second line of input contains n integers $a_1, a_2, \ldots, a_n$ ($1 \le a_i \le 10^9$), the ith of which indicates the pleasure of the ith 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