Time limit: 2.0s Memory limit: 64M

Farmer Yunji owns N farms. Each farm produces X_i dollars per day. Due to tax issues, he has to sell M of his farms. What is the maximum amount of money he can earn per day from his farms, after he sells M of them?

Input Specification

The first line will contain two space-separated integers, N, M ($1 \le M \le 10^5$), the number of farms, and the number of farms Yunji has to sell, respectively.

The next line will contain N integers, X_i $(1 \le X_i \le 10^5)$.

Output Specification

On the first line, output the maximum amount of money Yunji can make per day after selling M of his farms.

Constraints

Subtask 1 [15%]

 $M \leq \min(50, N)$

Subtask 2 [85%]

No additional constraints.

Sample Input 1

| 2.4 | | | |
|------|--|--|--|
| 2 1 | | | |
| 8 10 | | | |
| | | | |

Sample Output 1

10

Sample Input 2

| 3 | 3 | |
|----|----|----|
| 29 | 34 | 12 |

Sample Output 2

0