Floor Jumper

Input file: standard input
Output file: standard output

Time limit: 1 second Memory limit: 256 megabytes

In their conflict with the Programming Police, the Cyber Criminals have to jump floors. The number of floors in the building is described by an integer M. To determine the optimal jumping strategy, Robbie the Robber drops lines from the top floor to the floors below. The floors he drops lines to are described by a series of N spaced integers. What is the total distance of line Robbie would need?

Input

Line 1: Two space-separated integers, N and M

Line 2: N space-separated integers N_i , representing the lines dropped

Output

Line 1: The distance of line

Example

standard input	standard output
4 10	21
4 6 2 7	

Note

 $\begin{array}{l} 0 \leq N \leq 1,000 \\ 2 \leq M \leq 1,000 \\ 0 \leq N_i \leq 1,000 \end{array}$

 $M \geq N_i$