

HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP

STEP 1 STEP 2 STEP 3 STEP 4 STEP 5 | THEORY PRACTICE | SUBMIT SUBMISSIONS HACKS STANDINGS CUSTOM INVOCATION ITMO Academy: pilot course » Binary Search » Step 3 » Practice

C. Cows in Stalls

time limit per test: 2 seconds memory limit per test: 256 megabytes input: standard input output: standard output

Stalls are located on a straight line, your task is to arrange the cows to stalls so that the minimum distance between the cows is as large as possible.

Input

The first line contains numbers n ($2 \le n \le 10^4$), the number of stalls and k ($2 \le k \le n$), the number of cows. The second line contains n integer numbers in ascending order, the coordinates of the stalls (coordinates are in the range from 0 to 10^9 , inclusive).

Output

Print one number, the largest possible minimum distance between two cows.

Example

·	
input	Сору
6 3 2 5 7 11 15 20	
output	Сору
9	

Codeforces (c) Copyright 2010-2024 Mike Mirzayanov
The only programming contests Web 2.0 platform
Server time: Jun/29/2024 13:51:22 (l1).
Desktop version, switch to mobile version.

Privacy Policy

Supported by



