

1m 54s
left

1. Math Homework



ALL



Students have been assigned a series of math problems that have points associated with them. Given a sorted *points* array, minimize the number of problems a student needs to solve based on these criteria.

1. They must always solve the first problem, index $i = 0$.
2. After solving the i^{th} problem, they choose to solve the next problem $(i+1)$ or skip ahead and solve the $(i+2)$ problem.
3. Students must keep solving problems until the difference between the maximum and minimum points questions solved so far meets or exceeds a specified *threshold*.
4. If students cannot meet or exceed the threshold, they must solve all the problems.

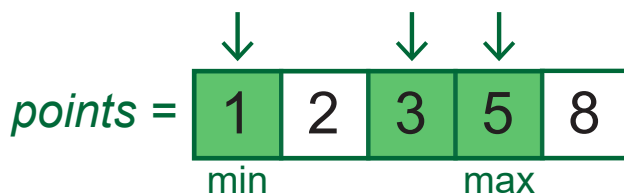
Return the minimum number of problems a student needs to solve.

Example

threshold = 4

points = [1, 2, 3, 5, 8]

If a student solves *points*[0] = 1, *points*[2] = 3 and *points*[3] = 5, then the difference between the minimum and the maximum points solved is $5 - 1 = 4$. This meets the *threshold*, so the student must solve at least 3 problems. Return 3.



If the threshold is 7, again it takes 3 problems solving problems 0, 2 and 4 where *points*[4] - *points*[0] = $8 - 1 = 7$. This meets the *threshold*, so the student must solve at least 3 problems. Return 3.

If the *threshold* is greater than 7, then there is no way to meet the *threshold*. In that case, all problems need to be solved and the return value is 5.

Function Description

Complete the function *minNum* in the editor.

minNum has the following parameters:

int threshold: the minimum difference required

int points[n]: a sorted array of integers