5451. Max Value of Equation

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Given an array points containing the coordinates of points on a 2D plane, sorted by the x-values, where points $[i] = [x_i, y_i]$ such that $x_i < x_j$ for all 1 <= i < j <= points.length. You are also given an integer <math>k.

Find the maximum value of the equation $y_i + y_j + |x_i - x_j|$ where $|x_i - x_j| \le k$ and $1 \le i < j \le points.length.lt is guaranteed that there exists at least one pair of points that satisfy the constraint <math>|x_i - x_j| \le k$.

User Accepted:	3
User Tried:	9
Total Accepted:	3
Total Submissions:	10
Difficulty:	Hard

Example 1:

Input: points = [[1,3],[2,0],[5,10],[6,-10]], k = 1

Output: 4

Explanation: The first two points satisfy the condition $|x_i - x_j| <= 1$ and if we calculate

No other pairs satisfy the condition, so we return the max of 4 and 1.

Example 2:

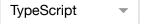
Input: points = [[0,0],[3,0],[9,2]], k = 3

Output: 3

Explanation: Only the first two points have an absolute difference of 3 or less in the x-v

Constraints:

- 2 <= points.length <= 10^5
- points[i].length == 2
- -10^8 <= points[i][0], points[i][1] <= 10^8
- 0 <= k <= 2 * 10^8
- points[i][0] < points[j][0] for all $1 \le i < j \le points.length$
- x_i form a strictly increasing sequence.









1 ▼ function findMaxValueOfEquation(points: number[][], k: number): number {

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