QN Link : <https://leetcode.com/problems/maximum-value-of-an-ordered-triplet-ii/submissions/1363643367/>

class Solution {

    public long maximumTripletValue(int[] nums) {

        int n = nums.length;

        long[] pref = new long[n];

        pref[1] = (long)(nums[0] - nums[1]);

        long d = Math.max(nums[1], nums[0]);

        long g = 0;

        for (int i = 2; i <= n - 1; i++) {

            pref[i] = Math.max(pref[i - 1], d - nums[i]);

            long possible = (long)(nums[i]) \* (pref[i - 1]);

            g = Math.max(g, possible);

            d = Math.max(d, nums[i]);

        }

        return g;

    }

}