There are n soldiers standing in a line. Each soldier is assigned a **unique** rating value.

You have to form a team of 3 soldiers amongst them under the following rules:

* Choose 3 soldiers with index (i, j, k) with rating (rating[i], rating[j], rating[k]).
* A team is valid if:  (rating[i] < rating[j] < rating[k]) or (rating[i] > rating[j] > rating[k]) where (0 <= i < j < k < n).

Return the number of teams you can form given the conditions. (soldiers can be part of multiple teams).

**Example 1:**

**Input:** rating = [2,5,3,4,1]

**Output:** 3

**Explanation:** We can form three teams given the conditions. (2,3,4), (5,4,1), (5,3,1).

**Example 2:**

**Input:** rating = [2,1,3]

**Output:** 0

**Explanation:** We can't form any team given the conditions.

**Example 3:**

**Input:** rating = [1,2,3,4]

**Output:** 4

**Constraints:**

* n == rating.length
* 1 <= n <= 200
* 1 <= rating[i] <= 10^5