

1989. Maximum Number of People That Can Be Caught in Tag

Description

You are playing a game of tag with your friends. In tag, people are divided into two teams: people who are "it", and people who are not "it". The people who are "it" want to catch as many people as possible who are not "it".

You are given a **0-indexed** integer array `team` containing only zeros (denoting people who are **not** "it") and ones (denoting people who are "it"), and an integer `dist`. A person who is "it" at index `i` can catch any **one** person whose index is in the range `[i - dist, i + dist]` (**inclusive**) and is **not** "it".

Return *the **maximum** number of people that the people who are "it" can catch*.

Example 1:

Input: `team = [0,1,0,1,0]`, `dist = 3`

Output: `2`

Explanation:

The person who is "it" at index 1 can catch people in the range `[i-dist, i+dist] = [1-3, 1+3] = [-2, 4]`.

They can catch the person who is not "it" at index 2.

The person who is "it" at index 3 can catch people in the range `[i-dist, i+dist] = [3-3, 3+3] = [0, 6]`.

They can catch the person who is not "it" at index 0.

The person who is not "it" at index 4 will not be caught because the people at indices 1 and 3 are already catching one person.

Example 2:

Input: `team = [1]`, `dist = 1`

Output: `0`

Explanation:

There are no people who are not "it" to catch.

Example 3:

Input: `team = [0]`, `dist = 1`

Output: `0`

Explanation:

There are no people who are "it" to catch people.

Constraints:

- `1 <= team.length <= 105`
- `0 <= team[i] <= 1`
- `1 <= dist <= team.length`

