# 825. Friends Of Appropriate Ages

# Description

There are n persons on a social media website. You are given an integer array ages where ages[i] is the age of the i th person.

A Person x will not send a friend request to a person y (x!=y) if any of the following conditions is true:

- age[y] <= 0.5 \* age[x] + 7
- age[y] > age[x]
- age[y] > 100 && age[x] < 100

Otherwise, x will send a friend request to y.

Note that if x sends a request to y, y will not necessarily send a request to x. Also, a person will not send a friend request to themself.

Return the total number of friend requests made.

### Example 1:

```
Input: ages = [16,16]
Output: 2
Explanation: 2 people friend request each other.
```

#### Example 2:

```
Input: ages = [16,17,18]
Output: 2
Explanation: Friend requests are made 17 -> 16, 18 -> 17.
```

# Example 3:

```
Input: ages = [20,30,100,110,120]
Output: 3
Explanation: Friend requests are made 110 -> 100, 120 -> 110, 120 -> 100.
```

## **Constraints:**

- n == ages.length
- 1 <= n <= 2 \* 10  $^4$
- 1 <= ages[i] <= 120