

# Problem 3200: Maximum Height of a Triangle

## Problem Information

**Difficulty:** Easy

**Acceptance Rate:** 43.84%

**Paid Only:** No

**Tags:** Array, Enumeration

## Problem Description

You are given two integers `red` and `blue` representing the count of red and blue colored balls. You have to arrange these balls to form a triangle such that the 1st row will have 1 ball, the 2nd row will have 2 balls, the 3rd row will have 3 balls, and so on.

All the balls in a particular row should be the **same** color, and adjacent rows should have **different** colors.

Return the **maximum** \_height of the triangle\_ that can be achieved.

**Example 1:**

**Input:** red = 2, blue = 4

**Output:** 3

**Explanation:**



The only possible arrangement is shown above.

**Example 2:**

**Input:** red = 2, blue = 1

**\*\*Output:\*\*** 2

**\*\*Explanation:\*\***

 The only possible arrangement is shown above.

**\*\*Example 3:\*\***

**\*\*Input:\*\*** red = 1, blue = 1

**\*\*Output:\*\*** 1

**\*\*Example 4:\*\***

**\*\*Input:\*\*** red = 10, blue = 1

**\*\*Output:\*\*** 2

**\*\*Explanation:\*\***

 The only possible arrangement is shown above.

**\*\*Constraints:\*\***

\* `1 <= red, blue <= 100`

## Code Snippets

**C++:**

```
class Solution {
public:
    int maxHeightsOfTriangle(int red, int blue) {
        }
};
```

**Java:**

```
class Solution {  
    public int maxHeightOfTriangle(int red, int blue) {  
        }  
    }
```

**Python3:**

```
class Solution:  
    def maxHeightOfTriangle(self, red: int, blue: int) -> int:
```