

# Problem 2274: Maximum Consecutive Floors Without Special Floors

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 52.35%

**Paid Only:** No

**Tags:** Array, Sorting

## Problem Description

Alice manages a company and has rented some floors of a building as office space. Alice has decided some of these floors should be **special floors**, used for relaxation only.

You are given two integers `bottom`` and `top``, which denote that Alice has rented all the floors from `bottom`` to `top`` (**inclusive**). You are also given the integer array `special``, where `special[i]` denotes a special floor that Alice has designated for relaxation.

Return `_the**maximum**` number of consecutive floors without a special floor\_.

**Example 1:**

**Input:** `bottom = 2, top = 9, special = [4,6]` **Output:** `3` **Explanation:** The following are the ranges (inclusive) of consecutive floors without a special floor: - (2, 3) with a total amount of 2 floors. - (5, 5) with a total amount of 1 floor. - (7, 9) with a total amount of 3 floors. Therefore, we return the maximum number which is 3 floors.

**Example 2:**

**Input:** `bottom = 6, top = 8, special = [7,6,8]` **Output:** `0` **Explanation:** Every floor rented is a special floor, so we return 0.

**Constraints:**

`1 <= special.length <= 105`` `1 <= bottom <= special[i] <= top <= 109`` All the values of `special`` are **unique**.

## Code Snippets

### C++:

```
class Solution {  
public:  
    int maxConsecutive(int bottom, int top, vector<int>& special) {  
  
    }  
};
```

### Java:

```
class Solution {  
    public int maxConsecutive(int bottom, int top, int[] special) {  
  
    }  
}
```

### Python3:

```
class Solution:  
    def maxConsecutive(self, bottom: int, top: int, special: List[int]) -> int:
```