

36. Kids With the Greatest Number of Candies There are  $n$  kids with candies. You are given an integer array `candies`, where each `candies[i]` represents the number of candies the  $i$ th kid has, and an integer `extraCandies`, denoting the number of extra candies that you have. Return a boolean array `result` of length  $n$ , where `result[i]` is `true` if, after giving the  $i$ th kid all the `extraCandies`, they will have the greatest number of candies among all the kids, or `false` otherwise. Note that multiple kids can have the greatest number of candies. Example 1: Input: `candies = [2,3,5,1,3]`, `extraCandies = 3` Output: `[true,true,true,false,true]` Explanation: If you give all `extraCandies` to: - Kid 1, they will have  $2 + 3 = 5$  candies, which is the greatest among the kids. - Kid 2, they will have  $3 + 3 = 6$  candies, which is the greatest among the kids. - Kid 3, they will have  $5 + 3 = 8$  candies, which is the greatest among the kids. - Kid 4, they will have  $1 + 3 = 4$  candies, which is not the greatest among the kids. - Kid 5, they will have  $3 + 3 = 6$  candies, which is the greatest among the kids. Example 2: Input: `candies = [4,2,1,1,2]`, `extraCandies = 1` Output: `[true,false,false,false,false]` Explanation: There is only 1 extra candy. Kid 1 will always have the greatest number of candies, even if a different kid is given the extra candy. Example 3: Input: `candies = [12,1,12]`, `extraCandies = 10` Output: `[true,false,true]`

PROGRAM:

```
def kidsWithCandies(candies, extraCandies):  
    max_candies = max(candies)  
    result = []  
    for num_candies in candies:  
        if num_candies + extraCandies >= max_candies:  
            result.append(True)  
        else:  
            result.append(False)  
    return result  
  
candies1 = [2, 3, 5, 1, 3]  
extraCandies1 = 3  
print(kidsWithCandies(candies1, extraCandies1))
```

```
candies2 = [4, 2, 1, 1, 2]  
extraCandies2 = 1  
print(kidsWithCandies(candies2, extraCandies2))
```

OUTPUT:

```
[True, True, True, False, True]  
[True, False, False, False, False]
```

TIME COMPLEXITY:  $O(n)$

