Problem

There are N houses for sale. The i-th house costs A_i dollars to buy. You have a budget of B dollars to spend.

What is the maximum number of houses you can buy?

Input

The first line of the input gives the number of test cases, T. T test cases follow. Each test case begins with a single line containing the two integers N and B. The second line contains N integers. The i-th integer is A_i, the cost of the i-th house.

Output

For each test case, output one line containing Case #x: y, where x is the test case number (starting from 1) and y is the maximum number of houses you can buy.

Limits

Time limit: 15 seconds per test set.
Memory limit: 1GB.
$1 \le T \le 100$.
$1 \le B \le 10^5$.
$1 \le A_i \le 1000$, for all i.

Test set 1

$1 \le N \le 100$.

Test set 2

$1 \le N \le 10^5$.

Sample

Input

```
3
4 100
20 90 40 90
4 50
30 30 10 10
3 300
```

999 999 999

Output
Case #1: 2
Case #2: 3
Case #3: 0

In Sample Case #1, you have a budget of 100 dollars. You can buy the 1st and 3rd houses for 20 + 40 = 60 dollars.
In Sample Case #2, you have a budget of 50 dollars. You can buy the 1st, 3rd and 4th houses for 30 + 10 + 10 = 50 dollars.
In Sample Case #3, you have a budget of 300 dollars. You cannot buy any houses (so the answer is 0).
Note: Unlike previous editions, in Kick Start 2020, all test sets are visible verdict test sets, meaning you receive instant feedback upon submission.

Solution (Java)

```
import java.util.*;
public class Solution {
   public static void main(String[] args) {
         Scanner sc = new Scanner(System.in);
         int N = sc.nextInt();
         sc.nextLine();

        while(N > 0){
           int n , b ;
           n = sc.nextInt();
           b = sc.nextInt();
           int[] a = new int[n];
           sc.nextLine();

           for(int i = 0 ; i < n ; i++){
```

```java
                    a[i] = sc.nextInt();
                }

                int temp;

                for(int i = 0 ; i < n-1 ; i++){
                    for(int j = i ; j < n-1 ; j++){
                        if(a[j] > a[j+1]){
                            temp = a[j];
                            a[j] = a[j+1];
                            a[j+1] = temp;
                        }
                    }
                }

                int sum = 0 ;
                int count = 0;

                for(int i = 0 ; i < n ; i++){
                    if((sum+=a[i]) <= b)
                        count++;
                    else
                        break;
                }

                System.out.println(count);
                N--;
            }
        }
    }
```