

Sale

Statement

Fluffy the Hamster is at a shopping mall, and there is a special sale.

There is a row of N items on display, numbered from 1 to N . Item i has price $\$P_i$.

Fluffy has a budget of $\$B$. To participate in the sale, Fluffy must purchase a *consecutive* set of items. The total cost of the set of items selected by Fluffy cannot exceed $\$B$.

Help Fluffy compute what is the largest number of items he can buy, and in how many different ways he can buy such a number of items.

Constraints

- $1 \leq N \leq 10^6$
- $1 \leq P_i \leq 3 \cdot 10^9$
- $1 \leq B \leq 10^{18}$.

Input

The first line of the input contains 2 integers N and B .

The next line contains N space separated integers P_1, \dots, P_N .

Output

Print two space separated integers: the largest number of items Fluffy can buy, and in how many different ways Fluffy can buy such a number of items.

Examples

Sample Input	Expected Output
7 5 2 2 1 4 2 1 2	3 2

Notes

1. A skeleton file has been given to help you. You should not create a new file or rename the file provided. You should develop your program using this skeleton file.
2. You are free to define your own helper methods and classes (or remove existing ones) if it is suitable but you must put all the new classes, if any, in the same skeleton file provided.

Skeleton File

You are given the skeleton file `Sale.java`. You should see the following contents when you open the file:

```
/**
 * Name      :
 * Matric. No :
 */

import java.util.*;

public class Sale {
    private void run() {
        // implement your "main" method here
    }

    public static void main(String args[]) {
        Sale runner = new Sale();
        runner.run();
    }
}
```