

Color The Big Wall

Problem Statement:

There is a big wall beside Bangladesh University Of Business & Technology (BUBT). The student of CSE wants to color it by many colors. So the Student of CSE wants permission to color the wall from Dipu Sir. Dipu sir not only gives the permission but also he maintains this.

The Wall is L meter long. Every student can do any of the Following two operations:

1. He can color the wall from i to j meter by a color.
2. Otherwise he can count the different numbers of color from i to j meter.

In this problem you have given length of wall number of student you have to do same task here.

Input:

Input starts with an integer **T** (≤ 25), denoting the number of test cases.

Each case contains two integers. The first integer means number of student **N** ($2 \leq N \leq 100$) second integer means the length of wall **L** ($1 < L < 1000$).

Next N lines contain work done by nth Student. Each line contain a word (color or report) .

1. If the word is color than you have a **color** ($A \leq \text{Color} \leq Z$). And index i and j.
2. If the word is report than there is two integer i & j you have to report how many different color form i to j .

You can assume that at first full wall length color is A.

Output:

For each case, print the case number and next lines print repots.

Sample Input	Sample Output
1	Case 1:
5 5	2
Color F 1 2	3
Color B 2 4	
Report 1 4	
Color C 4 5	
Report 1 5	

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