

H. Who Wins the Game?

Limits 2s, 512 MB

Rajib & Rakib are two friends. Both are going to a market to buy some chocolates. But there are some limited chocolates for every shop in the market. But they want unlimited chocolate if they can. So here are some lists of the chocolate numbers for every shop in the market. Then they pick their chocolates from the list.

But there is a condition:

No one can pick chocolate from the middle of the list. They must pick chocolate from the start shop or from the ending shop.

Rajib wants more chocolates than Rakib and the same things happen for Rakib also.**

Can you please tell me who picks more chocolates and what is the chocolate number difference between them?

Here always Rajib picks first.

Input

The first line of each test case contains a single integer n ($1 \leq n \leq 3000$) — the length of the shops in the market.

The second line of each test case contains n integers a_1, a_2, \dots, a_n ($1 \leq a_i \leq 10^9$) — the number of chocolate for each shop.

Output

Print the chocolate number difference between them and if Rajib pick more chocolate than Rakib Print "x Rajib" and if Rakib pick more chocolate than Rajib then Print "x Rakib", otherwise just print "x Both Chocolates are same" (Without quotes)

Here x is the value of the chocolate number difference between them.

Samples

| Input | Output |
|----------------|---------|
| 4 10 3 4 6 | 5 Rajib |
| Input | Output |
| 5 1 2 3 4 5 | 3 Rajib |

For the first sample at first Rajib picks 10 chocolates from the beginning, then Rakib picks 6 chocolates from the end, now Rajib picks 4 chocolates from the end and finally Rakib picks 3 chocolates from the beginning.

In total Rajib has 14 chocolates and Rakib has 9 chocolates. So the difference between them is $14 - 9 = 5$ and Rajib picks more chocolates.
So the answer is "5 Rajib".

Clarifications

+

for this case what should I print ? "x Both C...

Responded

22m ago

Is there any problem with this?

Responded

49m ago

Submit

Open IDE

C++17 GCC 9.2

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