Sherlock Holmes, the well known detective, must solve a puzzling situation. He has $n$ boxes $B_1, B_2, \ldots, B_n$, where $n$ is even, each containing $m$ balls. The balls are white and black. Let $B_i = (W_i, B_i)$ denote a box with $W_i$ white balls and $B_i$ black balls. He must partition the boxes into two sets, each consisting of $n/2$ boxes, such that either the white balls or the black balls hold a majority in both sets. If there is such a majority, let $m_1$ and $m_2$ denote the percentage of the majority balls in each set. Holmes must find very quickly the **maximum** possible value of $\min(m_1, m_2)$. Can you help Holmes?

## Input

The program input is from a text file. Each data set in the file stands for a particular set of boxes. A data set starts with the number $n$ ($n < 10000$) of boxes. Follows the number $m$ ($m < 10000$) of balls, and for each box the number ($< 10000$) of white and black balls in this specific order.

The program prints the color ('W' or 'B') of the balls that hold the majority followed by the maximum value — if there is such a majority, or 'No solution' if no majority can be obtained.

White spaces can occur freely in the input. The input data are correct and terminate with an end of file.

## Output

For each set of data the program prints the result to the standard output from the beginning of a line.

An input/output sample is below. There is a single data set that contains 4 boxes each containing 30 balls. The first box, for example, contains 17 white balls and 13 black balls. There is only one possible partition of the boxes $(B_1, B_4), (B_2, B_3)$, the white balls holding majority. The result for the data set is the identifier 'W' and the maximum value.

## Sample Input

```
4
30
17 13
12 18
20 10
14 16
```

## Sample Output

```
W 51.67
```