

Arya and Margaret get to know each other

Problem ID: aryaknow

Arya and Margaret met at a programming contest. In order to know each other better, they began to discuss their favorite algorithms. Arya made a list of x algorithms, while Margaret's list has y algorithms.

They decided to take turns to discuss every algorithm on their list. For example, if Arya starts first, she might tell Margaret about the Dijkstra algorithm for shortest paths. Then Margaret might explain the John Hopcroft algorithm for maximum weight bipartite matching. After that, Arya might talk about the Ford-Fulkerson algorithm for maximum flow, and so on. (Yes, they share a common interest in graph algorithms!)

They will continue in this fashion until it's a person's turn, but she doesn't have any more algorithms on her list. This person will then think of something else, such as the P versus NP problem.

Can you help figure out who will be this person?

Input

The input contains a single line containing two integers: x and y ($0 \leq x \leq 10^9$ and $0 \leq y \leq 10^9$).

Output

The output should contain a single line with either "Depends on who starts", "Arya will think of something else" or "Margaret will think of something else".

Sample Input 1

3 3

Sample Output 1

Depends on who starts

Sample Input 2

1 1000000

Sample Output 2

Arya will think of something else

Sample Input 3

42 15

Sample Output 3

Margaret will think of something else
