Difficult cooperation

- Time limit: 1 second
- Memory limit: 256 MB

Mohammad Javad, who is very diligent, works in the same company with Mustafa, who is a workaholic. Mohammad Javad n, and Mustafa m The type of work they do in the company. The financial problems of the company have increased recently and the director wants to retrench. If one of the people in the company does not have any extra work for the other, it is useless in the company. Now it's your job to tell them if any of them are useless. If Mustafa does all the work that Mohammad Javad does and has extra work, Mohammad Javad's presence in the company is useless. If this is the case, Mustafa has no use for the company. If both are doing exactly the same set of tasks, the boss will fire them both because of this inconsistency, and otherwise, everyone will continue their work happily.

Input

In the first line, enter two numbers n And m It is stated that it shows the number of jobs that Mohammad Javad and Mustafa do respectively.

In the second line n There is a number that indicates the type of work that Mohammad Javad does. All numbers are different.

In the third line m There is a number that indicates the type of work that Mustafa does. All numbers are different.

The type of work that Mohammad Javad and Mustafa do are natural and smaller numbers equal to one billion.

$$1 \le n, m \le 100\,000$$

Output

If Mohammad Javad's presence in the company is useless, then "Mohammad Javad" should be printed.

If Mustafa's presence in the company is useless, then "Mostafa" should be printed.

If both do exactly the same set of tasks, "Both" should be printed.

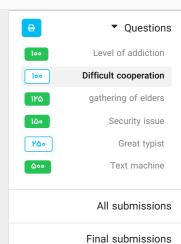If none of the above conditions exist, "None" should be printed.

Example

Sample input 1

```
2 3
1 2
1 2 190
```

Sample output 1

```
Mohammad Javad
```

Sample input 2

```
3 3
1 2 190
1 2 190
```

Sample output 2

```
Both
```

Sample input 3

```
2 3
2 5
1 2 190
```

Sample output 3

```
None
```

POST AN ANSWER TO THIS QUESTION

The training period is over.