Arcadia Computing Contest 2 P1 - Rejected

Time limit: 2.0s   **Memory limit:** 256M

After logging into his CalTech application portfolio and seeing a fat rejection notice, Bryan is heartbroken. What does he do to take his mind off things? The Arcadia Computing Contest, obviously!

Knowing that the Arcadia Computing Contest is a rated contest, Bryan is dedicated to gain rating and obtain the elusive Master title. He knows that there will be 6 problems, each being worth 100 points, with subtasks available for some partial points. So, he looks to you to help him determine if his contest performance is good enough to get him the title!

In order to get the Master title, Bryan needs to fulfill all of the following criteria:

1. Score at least X points overall
2. Fully solve (get 100 points on) at least Y problems
3. Get a non-zero number of points on at least Z problems

NOTE: The rating information provided in this problem is purely fictional and may not be representative of the actual difficulty of the contest.

Constraints

$0 \leq X \leq 600$

$0 \leq Y, Z \leq 6$

Input Specification

The first line will contain three integers, X, Y, and Z.

The second line will contain six integers, corresponding to Bryan's score on each of the problems.

Output Specification

Output `MASTER` if Bryan will receive the title, or `REJECTED AGAIN` if he will not.

Sample Input 1

```
400 2 5
100 100 75 50 0 100
```

Sample Output 1

```
MASTER
```

Explanation for Sample 1

Bryan fully solves 3 problems, gets points on 5 problems, and has a total score of 425. Clearly, all of the criteria has been met, so he becomes a Master!

Sample Input 2

```
500 3 4
100 100 100 0 0 0
```

Sample Output 2

```
REJECTED AGAIN
```

Explanation for Sample 2

Bryan fully solves 3 problems, gets points on 3 problems, and has a total score of 300. Since his total score was less than 500 and the number of problems he got points on was less than 4, he does not get the Master title.