

Qualify the round

In a coding contest, there are two types of problems:

- Easy problems, which are worth 1 point each
- Hard problems, which are worth 2 points each

To qualify for the next round, a contestant must score at least X points. Chef solved A Easy problems and B Hard problems. Will Chef qualify or not?

Input Format

- The first line of input contains a single integer T , denoting the number of test cases. The description of T test cases follows.
- Each test case consists of a single line of input containing three space-separated integers — X , A , and B .

Output Format

For each test case, output a new line containing the answer — `Qualify` if Chef qualifies for the next round, and `NotQualify` otherwise.

Each character of the answer may be printed in either uppercase or lowercase. For example, if the answer is `Qualify`, outputs such as `qualify`, `quALiFY`, `QUALIFY` and `QuAlIfY` will also be accepted as correct.

Constraints

- $1 \leq T \leq 100$
- $1 \leq X \leq 100$
- $0 \leq A, B \leq 100$

Sample 1:

Input	
Output	
3 15 9 3 5 3 0 6 2 8	

Qualify
NotQualify
Qualify

Explanation:

Test Case 1: Chef solved 9 easy problems and 3 hard problems, making his total score $9 \cdot 1 + 3 \cdot 2 = 15$. He needs at least 15 points to qualify, which he has and hence he qualifies.

Test Case 2: Chef solved 3 easy problems and 0 hard problems, making his total score $3 \cdot 1 + 0 \cdot 2 = 3$. He needs at least 5 points to qualify, which he doesn't have and hence doesn't qualify.

Test Case 3: Chef solved 2 easy problems and 8 hard problems, making his total score $2 \cdot 1 + 8 \cdot 2 = 18$. He needs at least 6 points to qualify, which he has and hence he qualifies.