Time limit: 1.0s Memory limit: 64M

Because Gabriel got an early offer from UOIT, his overjoyed parents gave him a lot of Rubik's Cubes as a reward. However, he soon developed Carpal Tunnel Syndrome, and now has to sell some of his cubes at **half of their original price** to pay for his medical bills.

Gabriel is a very unique person; the N cubes that he got each have a distinct value V_{ii} and are placed in a straight line. He wants to know if he has a total of at least M dollars after he sells all of his cubes inclusively between the one valued at V_a and the one valued at V_b (in the line). He specifically wants to ask Q questions in the form (V_a, V_b) to know if he has enough money after selling all of the cubes in that range. Both cubes are guaranteed to exist in the sequence.

Note: it may be helpful to use unsigned 64-bit variables (e.g. unsigned long long in C++).

Constraints

Subtask 1 [10%]

- $1 \leq N,Q \leq 100$
- $1 \le M, V \le 1\,000$

Subtask 2 [90%]

- $1 \leq N,Q \leq 100\,000$
- $1 \le M \le 10\,000\,000$
- $1 \le V \le 1\,000\,000$

Input Specification

The first line of input will consist of 3 space-separated integers N, M, and Q. The next line will contain N space-separated integers, where the i^{th} integer represents the V_i^{th} value. For the next Q lines, each line will contain 2 space separated integers V_a and V_b .

Output Specification

For each question, output [Enough] if Gabriel can afford his bills or [Not enough] if he cannot.

Sample Input

Sample Output

Not enough Enough