

laptop

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 256 megabytes

This is a work of fiction. All names events are fictional. Any similarity to any persons, living, dead, OR POSSESSED, is entirely coincidental.

It is a normal day in Pannawit Junior College. The school's competitive programming club is preparing for the National Informatics Olympiad, and like any other informatics contest, they will need to use a laptop to code their programs to solve the questions. Pan, a freshman, is also in the team for the competition. Normally, he would just use his personal learning device (PLD) to code his programs, but everyone knows that a Chromebook does not really support intensive coding. Hence, Pan is buying a new laptop.

Initially, Pan wanted to just pick a random computer (he is lazy). However, Xen Win, his senior and also his partner in the club, told him that she thought laptops made by Papple would be more suitable for heavy tasks. You might think that Pan is lazy and wouldn't pay attention to such details, but he did note down what she said, out of trust for his caring senior. She is his partner after all.

Pan has very little money. To be exact, he has M money. He is willing to spend all M money to buy a good laptop. When he entered the shop, he noticed they are selling exactly N different laptop models. He also noticed that some of the laptops were produced by the brand Papple that Xen Win recommended. He would preferably want to buy a Papple laptop, and otherwise he would buy the cheapest one. This means he would want to buy the cheapest Papple laptop, but if there are no laptops manufactured by Papple for sale, then he would want to buy the cheapest laptop that's available.

Thus, help Pan find out what type of laptop he will buy and its cost!

Input

The first line will consist of two integers separated by a space, N and M .

The next N lines will consist of two integers separated by a space, T and C .

C represents the cost of the laptop, while T tells you if the laptop is made by Papple or not

If $T = 0$, it means the laptop is not made by Papple

If $T = 1$, it means the laptop is made by Papple

Output

Output "Pan will buy a laptop <made by/not made by> Papple that will cost him <cost>."

If he can't buy one, output "NA"

Scoring

For all subtasks, $0 < N, M < 500000$; $0 < C < 10^{15}$

Subtask 1 (68 points): $T = 0$

Subtask 2 (31 points): No additional constraint

Subtask 3 (1 point): Sample input

Example

standard input	standard output
5 6 1 9 1 5 0 6 0 0 1 3	Pan will buy a laptop made by Papple that will cost him 3.

Note

For sample testcase, Pan would preferentially choose laptops made by Papple, so we can pick out the pairs that starts with 1 to consider first.

(1, 9) (1, 5) (1, 3)

The cheapest Papple laptop that he can get costs 3, which is below the maximum money Pan has (which is 6). Hence, he will buy that laptop, without considering those laptops which are not made by Papple.

“Pray that Pan won’t hunt me”

— Frank, *Trouble of Creation*