Daily Chores of Bu Aya

Time Limit: 1 s Memory Limit: 256 MB



Description

Bu Aya is a housewife of Pak Aya. She do daily chores at home, but here's a catch. Bu Aya only have a certain amount of energy to do the chores. Bu Aya decided to prioritize doing the chore with the lowest priority first, so she can do more chores. Given the amount of energy Bu Aya has, and a list of task she needs to do, find what chores Bu Aya has to do

Input Format

- The first line contains three integers, e, and n. e being the amount of energy and n is the number of chores Bu Aya has
- The next n lines will contain i and s, i is the priority and s is a string that represents the task name.

Output Format

If Bu Aya can do atleast one chores, print the name s. If more, print all of them from the lowest to the highest score. Otherwise, print Pak Aya will do the rest

Constraints

 $1 \le e, n, i \le 1000$ $strlen(s) \le 64$

Example

#0

Input

10 5

- 3 menyapu_rumah
- 2 mencuci_piring
- 5 memasak
- 8 mencuci_pakaian
- 1 makan

0utput

makan

mencuci_piring

menyapu_rumah

#1

Input

- 5 3
- 7 memasak
- 9 mencuci_piring
- 6 makan

Output

Pak Aya will do the rest