Task 07: **Search and Rescue**

[150 points]

The Rebels have intercepted information regarding the locations of Rebel prisoners of war! They need help to determine the optimal strategy for their search and rescue team.

Problem Statement

The intercepted information that the Rebels captured is in space delimited format. The data consists of three parameters: time of capture, ID number of the rebel prisoner, and the prisoner's distance from the Imperial Headquarters. The data is sorted in ascending order by time of capture.

Since a Rebel Search and Rescue team is already undercover in the Imperial Headquarters, they will be able to rescue the prisoners that are closest to the Imperial Headquarters. In order to help the Rebel search and rescue team, you must sort the intercepted information by distance from the Imperial Headquarters. Each Rebel search and rescue team has a maximum number of prisoners they can rescue, and you must output the IDs of closest prisoners to the Imperial Headquarters that the Rebels can rescue.

Input Format

A single number `M` denoting the maximum number of prisoners that the search and rescue team can rescue. This is followed by an integer `L` denoting the length of the space delimited list. The following `L` lines contain a prisoner's time of capture, his or her ID number, and the prisoner's distance from the Imperial Headquarters.

Input Constraints

- $0 < M \leq 100$
- $0 < L \leq 100,000$

Output Format

Output `M` IDs of the closest prisoners to the Rebel Search and Rescue Team, in ascending order of their distance to the Imperial Headquarters.

Sample Input

```
3
8
27 123613 18734
55 1178231 12312
98 66902398 12333
108 202332 18734
149 88801 18711
200 6783 1329
333 198347 17830
343 18373 17840
```

Sample Output

```
6783
1178231
66902398
```