A. Alphabetic Removals

time limit per test: 2 seconds
memory limit per test: 256 megabytes

You are given a string s consisting of n lowercase Latin letters. Polycarp wants to remove exactly k characters ($k \le n$) from the string s. Polycarp uses the following algorithm k times:

- if there is at least one letter 'a', remove the leftmost occurrence and stop the algorithm, otherwise go to next item;
- if there is at least one letter 'b', remove the leftmost occurrence and stop the algorithm, otherwise go to next item;
- ...
- remove the leftmost occurrence of the letter 'z' and stop the algorithm.

This algorithm removes a single letter from the string. Polycarp performs this algorithm exactly k times, thus removing exactly k characters.

Help Polycarp find the resulting string.

Input

The first line of input contains two integers n and k ($1 \le k \le n \le 4 \cdot 10^5$) — the length of the string and the number of letters Polycarp will remove.

The second line contains the string s consisting of n lowercase Latin letters.

Output

Print the string that will be obtained from s after Polycarp removes exactly k letters using the above algorithm k times.

If the resulting string is empty, print nothing. It is allowed to print nothing or an empty line (line break).

Examples

input Copy

```
15 3
cccaabababaccbc
```

output Copy

```
cccbbabaccbc
```

input Copy

```
15 9
cccaabababaccbc
```

output Copy

```
cccccc
```

input Copy

```
1 1
u
```

output Copy

ICPC Assiut University Training - Juniors Phase 1 Sheets-2022

Public

Participant

→ Group Contests

- Juniors Phase 1 Practice #5 (Bitmask, Bitset, Bits)
- Juniors Phase 1 Practice #4 (Binary search , Two pointers)
- Juniors Phase 1 Practice #3 (STL 2)
- Juniors Phase 1 Practice #2 (STL 1)
- Juniors Phase 1 Practice #1 (Prefix sum , Frequency Array)

Juniors Phase 1 Practice #1 (Prefix sum , Frequency Array)

Finished

Practice

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Submit?

Language: GNU G++20 13.2 (64 bit, win

Choose file: Choose File No file chosen

Submit

→ Last submissions

Submission	Time	Verdict
226856451	Oct/06/2023 12:57	Accepted
226852870	Oct/06/2023 12:27	Accepted
226847834	Oct/06/2023 11:51	Time limit exceeded on test 4