Problem D – Largest possible integer

Given an integer M with n digits and an integer k. Find a way to erase k digits of the integer M so that the remaining digits of M will be the largest possible integer.

Input

- The first line contains two integers n, k where n is the number of digits of the number M, k is the number of digits to be deleted.
- The second line contains the integer M.

Output

- The largest possible integer after removing k digits.

Subtask

- 50% tests: $n \leq 1000$;
- 50% tests: $n \leq 5 \times 10^5$

Example 1

Input

4 2

8924

Output

94

Example 2

Input

10 4

4177252841

Output

775841