A. String Functions

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

Given two numbers N, Q and a string S of size N. Followed by Q lines of the following queries:

- **pop_back** : remove the last character in the string.
- **front** : print the first character in the string.
- **back** : print the last character in the string.
- **sort l r** : where $(1 \leq l, r \leq |S|)$ sort all characters of S from l to r.
- **reverse l r** : where $(1 \leq l, r \leq |S|)$ reverse all characters of S from l to r.
- **print pos** : where $(1 \leq pos \leq |S|)$ print the character in the index pos.
- **substr l r** : where $(1 \leq l, r \leq |S|)$ print sub-string of s from l to r.
- **push_back x** : add character x in the end of the string.

For each query, print the answer associated with it in a single line.

It's guaranteed that in the first 7 types of the query, the string is not empty.

it's recommended to use built-in functions of String.

Input

The first line contains two integers N, Q $(1 \leq N, Q \leq 10^3)$ N denoting the size of the string and Q number of queries.

The second line contains the string S consists of only **lowercase** English letters.

Next Q lines contain the queries.

Output

For each query, print the answer associated with it in a single line.

Example

input Copy

```
18 8
assiutinupperegypt
substr 1 6
sort 5 8
pop_back
back
reverse 1 6
front
push_back i
print 4
```

output Copy

```
assiut
p
n
s
```


ICPC Assiut University Training - Standard - Juniors Phase 1

Public

Participant

→ Group Contests

- Standard #5 (Bits , bit-masking)
- Standard #4 (Binary search , two pointers)
- Standard #3 (set , sorting, compare function , map)
- Standard #2 (binary search , stack , queue, deque , priority queue)
- Standard #1 (Frequency , prefix sum , vector , pair ,struct)

Standard #2 (binary search , stack , queue, deque , priority queue)

Finished

Practice

→ Virtual participation

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Start virtual contest

→ Submit?

Language: GNU G++20 11.2.0 (64 bit, w

Choose file: Choose File No file chosen

Submit

→ Last submissions

Submission	Time	Verdict
226483185	Oct/03/2023 20:50	Accepted
226483062	Oct/03/2023 20:49	Accepted