A. New Password

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

Innokentiy decides to change the password in the social net "Contact!", but he is too lazy to invent a new password by himself. That is why he needs your help.

Innokentiy decides that new password should satisfy the following conditions:

- the length of the password must be equal to n,
- the password should consist only of lowercase Latin letters,
- the number of distinct symbols in the password must be equal to k,
- any two consecutive symbols in the password must be distinct.

Your task is to help Innokentiy and to invent a new password which will satisfy all given conditions.

Input

The first line contains two positive integers n and k ($2 \le n \le 100$, $2 \le k \le min(n, 26)$) — the length of the password and the number of distinct symbols in it.

Pay attention that a desired new password always exists.

Output

Print **any** password which satisfies all conditions given by Innokentiy.

Examples

input
4 3
output
java

input
6 6
output
python

input
5 2
output
phphp

Note

In the first test there is one of the appropriate new passwords — `java`, because its length is equal to 4 and 3 distinct lowercase letters `a`, `j` and `v` are used in it.

In the second test there is one of the appropriate new passwords — `python`, because its length is equal to 6 and it consists of 6 distinct lowercase letters.

In the third test there is one of the appropriate new passwords — `phphp`, because its length is equal to 5 and 2 distinct lowercase letters `p` and `h` are used in it.

Pay attention the condition that no two identical symbols are consecutive is correct for all appropriate passwords in tests.