```
#include <stdio.h>
void generateNames(char* name, int k, int n, int left){
    if(left == 0){ // Yay! nothing left - print the name
        printf("%s\n", name);
        return;
    for(int i = 0; i < n; i++){ // To achieve lexicographically increasing order, start from
smallest letter
        name[k - left] = 'a' + i;
        generateNames(name, k, n, left - 1); // One less letter is left to be inserted
    }
}
int main(){
    int n, k;
    scanf("%d %d", &n, &k);
    char name[k+1];
    name[k] = '\0'; // All names have k characters
    generateNames(name, k, n, k); // k characters are left
    return 0;
}
```