```
#include <stdio.h>
void printFunc(int *func, int len){
    for(int i = 0; i < len; i++){
        printf("%d", func[i]);
        if(i < len - 1) printf(" ");</pre>
    printf("\n");
}
void genFunctions(int *func, int n, int MAX, int i, int y){
    // Done generating the function - print it neatly!
    if(i == n){
        printFunc(func, n);
        return;
    }
    // Start from the smallest allowed value y and go up
    // This will produce functions in the lexicographically
    // increasing order as asked in the question
    for(; y <= MAX; y++){
        func[i] = y;
        genFunctions(func, n, MAX, i + 1, y);
    }
}
int main(){
    int n, MAX;
    scanf("%d %d", &n, &MAX);
    int func[n];
    // Generate all functions - till now, nothing has been generated
    // i.e. fourth argument is 0 and we can use 0 as the y value so
    // the fifth coordinate is 0 too
    genFunctions(func, n, MAX, 0, 0);
    return 0;
}
```