

## Problem C. Collection of sets

Input file:            standard input  
Output file:           standard output  
Time limit:            1 second  
Memory limit:         256 megabytes

Given set  $A = \{1, 2, \dots, n\}$  and collection of its subsets  $L$  each having the same size  $k$ , consider the following process:

1. Assign weight 1 or 2 equiprobably independently to each element of  $A$ .
2. Calculate the weight of every subset in  $L$  as a sum of weights of its elements.
3. Assignment of weights is considered *good* if only one subset in  $L$  has the minimal weight.

You are given set  $A = \{1, 2, \dots, n\}$  and integer  $k$ , denoting the size of every subset in  $L$ . Your task is to build such collection  $L$ , that the probability of the good assignment is less than  $\frac{1}{100}$ .

For example,  $A = \{1, 2\}$ ,  $L = \{\{1\}, \{2\}\}$ . Assignments  $\{1, 2\}$  and  $\{2, 1\}$  are good, while  $\{1, 1\}, \{2, 2\}$  aren't good, because weights of subsets are equal and both of them are minimal. So probability of good assignment equals  $\frac{1}{2}$ .

### Input

The only line of the input file contains two integers  $n, k$ .

In sample  $n = 2, k = 1$ , and any correctly formatted output will be judged as OK. Note that there is no collection satisfying the requirements from the statement for that case.

In tests  $n = 14, 2 \leq k \leq 12$  and it is guaranteed that solution exists.

### Output

On the first line print integer  $m$  — the number of subsets in  $L$ .

Next  $m$  lines contain descriptions of subsets.  $i$ -th of them contains  $k$  distinct integers between 1 and  $n$  separated by spaces, denoting its elements.

All subsets in the output must be distinct.

### Examples

| standard input | standard output |
|----------------|-----------------|
| 2 1            | 2<br>1<br>2     |