Combinations

By given ${\bf N}$ and ${\bf K}$, print all K-combinations of N elements.

Input

- Read from the standard input
- From the first lint, read **N** and **K**, separated by a single space

Output

- Print on the standard output
- Print all the K-combinations of the numbers between 1 and N
 - Sorted alphabetically as numbers (i.e. 2 is before 11)

Sample tests

Input

3 2

Output

1 2

1 3

2 3

Input

4 3

Output

1 2 3

1 2 4

1 3 4

2 3 4

Input

1 1

Output

1