Recursive Functions

nikki enjoys recursive functions.

This time she enjoys the sorting function. Let 'a' is a permutation of an integers from 1 to n, inclusive, and a_i denotes the i-th element of the permutation. nikki's recursive function f(x), that

sorts the first x permutation's elements, works as follows:

==> If x=1, exit the function.

==> Otherwise, call f(x-1), and then make $swap(a_x-1,a_x)$ (swap the x-th and (x-1)-th elements of a).

nikki's teacher believes that this function does not work correctly. But that-be do not get an F, the nikki wants to show the performance of its function. Help her, find a permutation of numbers from 1 to n, such that after performing the nikki's function (that is call f(n)), the permutation will be sorted in ascending order.

INPUT

The first line of input contains an integer $T(T \le 1000)$, the number of test cases in the input. T lines follow, one for each test case, each containing a integer n ($1 \le n \le 1000$) - the size of permutation.

OUTPUT

For each test case in a single line print n distinct integers from 1 to n - the required permutation. Numbers in a line should be separated by spaces. It is guaranteed that the answer exists.

SAMPLE

Input
2
1
2
Output
1
21