



Permutations

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✓ **Points:** 100 (partial)

⌚ **Time limit:** 1.2s

📄 **Memory limit:** 64M

✍ **Author:**

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🏷 **Tags**

Brute Force, Combinatorics, Recursion

⬆ **Difficulty**

Intermediate

By given , generate all permutations with numbers between and

Input

- Read from the standard input
- On the single line of the input you will receive the number

Output

- Print to the standard output
- Print all the permutations of the numbers, sorted alphabetically

Sample tests

Input

3

Copy

Output

```
1 2 3
1 3 2
2 1 3
2 3 1
3 1 2
3 2 1
```

Copy

Input

4

Copy

Output

Copy

```
1 2 3 4
1 2 4 3
1 3 2 4
1 3 4 2
1 4 2 3
1 4 3 2
2 1 3 4
2 1 4 3
2 3 1 4
2 3 4 1
2 4 1 3
2 4 3 1
```

Input

```
10
```

[Copy](#)

Output

```
1 2 3 4 5 6 7 8 9 10
...
2 1 3 4 5 6 7 8 9 10
...
10 9 8 7 6 5 4 3 2 1
```

[Copy](#)

Comments

There are no comments at the moment.