

Q4. Permutation

Given a string, find all possible permutations.

There is no template in this lab, you must do it all by yourself.

Input Format

Enter a string where each character is different.
See sample input for details.

Output Format

Print the all possible permutations of string.
See more detail from Sample output.

Sample Input

ABCD

Sample Output

```
ABCD
ABDC
ACBD
ACDB
ADCB
ADBC
BACD
BADC
BCAD
BCDA
BDCA
BDAC
CBAD
CBDA
CABD
CADB
CDAB
CDBA
DBCA
DBAC
DCBA
DCAB
DACB
DABC
```