

Practice problems aimed to improve your coding skills.

- PRACTICE-02\_SCAN-PRINT
- PRACTICE-03\_TYPES
- LAB-PRAC-02\_SCAN-PRINT
  - Mr C goes on a diet
  - Permute Password
  - 2 Escapes around Tutors
  - 2 Amusing Fractions
  - 2 P and C
  - Build a Rhombus
  - 2 Developing Interest at IITK
  - Pick your Choice
  - 2 Lego Safe
  - Race Car
  - Reverse Gear
  - 2 Numerical Flowers
- LAB-PRAC-01
- PRACTICE-04 COND
- **BONUS-PRAC-02**
- LAB-PRAC-03\_TYPES
- PRACTICE-05 COND-LOOPS
- LAB-PRAC-04\_COND
- LAB-PRAC-05\_CONDLOOPS
- PRACTICE-07\_LOOPS-ARR
- LAB-PRAC-06\_LOOPS
- LAB-PRAC-07\_LOOPS-ARR
- LABEXAM-PRAC-01 MIDSEM
- PRACTICE-09\_PTR-MAT
- LAB-PRAC-08\_ARR-STR
- PRACTICE-10 MAT-FUN
- **☎** LAB-PRAC-09\_PTR-MAT
- LAB-PRAC-10\_MAT-FUN
- PRACTICE-11 FUN-PTR
- LAB-PRAC-11\_FUN-PTR
- LAB-PRAC-12\_FUN-STRUC
- **►** LABEXAM-PRAC-02\_ENDSEM
- LAB-PRAC-13\_STRUC-NUM
- LAB-PRAC-14\_SORT-MISC

# Permute Password

LAB-PRAC-02\_SCAN-PRINT

## Permute Password [20 marks]

-----

#### **Problem Statement**

You forgot the CVV of your ATM card which has 3 digits. Trying to recall it, you were able to remember the digits individually, but not their order. For example, you recall that the digits 5, 8, and 0 were there in the number but you have forgotten if the CVV number is 508 or 805 or something else.

Mr C has offered to help you recover your CVV code. Mr. C will take 3 digits from you and print out all permutations of these digits, one permutation in each line. Your code should take 3 integers as input, each representing one digit of the CVV code. The permutations should be printed in increasing

#### Caution

- 1. Permutations should be output in increasing order, one on each line.
- 2. Do not use any datatype other than int.
- 3. Do not use any library other than stdio.h

You may assume that

- 1. The three digits given to you are distinct
- 2. The digits in the CVV code are also distinct, i.e. no digit repeats in your CVV code
- 3. You will be given the digits in increasing order, i.e. in the previous example, the digits will be given to you in the order 0, 5, 8.

**HINTS**: Visible tests are there to show you how to give the output as well as warn you if you have extra spaces or extra lines etc in your output. There should be only 6 lines in your output, one corresponding to each permutation.

\_\_\_\_\_

### **INPUT**:

digit1 digit2 digit3

#### **OUTPUT**:

permutation1

permutation2

permutation3

permutation4

permutation5

permutation6

## **EXAMPLE**:

**INPUT** 

123

OUTPUT:

123

132	
213	
231	
312	
321	

## **Grading Scheme:**

Total marks: [20 Points]

There will be no partial grading in this question. An exact match will receive full marks whereas an incomplete match will receive 0 marks. Please be careful of the order of the permutation (take help of visible test cases) as well as extra spaces and lines. Each visible test case is worth 2 points and each hidden test case is worth 4 points.

**¥**¶ Start Solving! (/editor/practice/5950)