Practice Arena

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
  - Escapes around Tutors
  - Amusing Fractions
  - P and C
  - Build a Rhombus
  - Developing Interest at IITK
  - Pick your Choice
  - Lego Safe
  - Race Car
  - Reverse Gear
  - 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

Pick your Choice

LAB-PRAC-02_SCAN-PRINT

Pick your choice [20 marks]

Problem Statement
We will give you 4 distinct digits from 0-9, i.e. no two digits will be the same. The digits will be given to you as integers in increasing order. For example, we may give you 1, 5, 6, 8. Your job is to find the following

1. Find the largest and second largest single digit number you can form out of the given digits and print their sum. E.g., in the above case, the two largest single digit numbers out of the given digits are 8 and 6, and their sum is 14.
2. Find the largest and second largest double digit number you can form out of the given digits and print their sum. Note that no number should repeat digits but the two numbers may share digits. E.g., in the above case, the two largest double digit numbers out of the given digits are 86 and 85, and their sum is 171. Note that no number repeats digits although the digit 8 is shared across the numbers.
3. Find the largest and second largest triple digit number you can form out of the given digits and print their sum. No number should repeat digits but the two numbers may share digits. E.g., in the above case, the sum of the two largest triple digit numbers out of the given digits is 1726.

Caution

1. Print all three numbers on different lines.
2. The four digits given to you are distinct and are given in increasing order.
3. The two double digit numbers you construct should not repeat digits but the two numbers may share digits.
4. The two triple digit numbers you construct should not repeat digits but the two numbers may share digits.
5. Do not use any datatype other than int.
6. Do not use any library other than stdio.h

HINTS: Visible test cases 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.

INPUT:
digit1 digit2 digit3 digit4
OUTPUT:
sum1
sum2
sum3

EXAMPLE:
INPUT
1 5 6 8
OUTPUT:
14

171
1726

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 missing/extra spaces and missing/lines (take help of visible test cases). Each visible test case is worth 2 points and each hidden test case is worth 4 points. There are 2 visible test cases and 4 hidden test cases.

Start Solving! (/editor/practice/5956)