

2003-2004

**American Computer Science League**

**Junior Division**

Contest #1

**Change Digits**

PROBLEM: Given a positive integer, change the integer according to the following rules:

1. Find the largest digit. If the largest digit appears more than once, the left most occurrence will be the digit used below.
2. If that digit is odd, change it to a zero.
3. If that digit is even, then add 4 to that digit. If the sum is  $>9$  then change the digit to the digit in the one's place of the sum.

INPUT: There will be 5 inputs. Each input will be a positive integer less than 100,000.

OUTPUT: Print the new integer. There will be no spaces between the printed digits.

SAMPLE INPUT

1. 132
2. 1421
3. 18234
4. 923

SAMPLE OUTPUT

1. 102
2. 1821
3. 12234
4. 23 (note: 023 is not correct)

*Reminder: Please note that the ACSL rules state that you must work alone on the programming problem. You must give your advisor a copy of your code within 72 hours. Note that your program must accept and print all data in **ONE** run of the program. If the program stops, no further data may be entered by starting the program*