



Problem of the Week

Problem C

Jumbled Numbers 1

Imani wrote a program that switches digits in numbers. Users enter a 4-digit number and then use the following buttons to switch digits in the number:

Button	Function
red	switches the thousands and tens digits
blue	switches the hundreds and units (ones) digits
yellow	switches the thousands and units (ones) digits

Imani enters the last four digits of her phone number, then presses the following sequence of buttons, in order from left to right.



The number now shown is 2148.

Then, Imani restarts the program, enters the last four digits of her phone number again, and presses the following sequence of buttons, in order from left to right.



What number is now shown?