

Problem : Encryption

A company wants to transmit data over the telephone line, but they are concerned that their lines are tapped. All of their data is transmitted as four-digit integers. They have asked you to write a program that encrypts their data so that it may be transmitted more securely.

Your program should read a four-digit integer from a data file (*telephone.txt*) and encrypt it as follows:

Replace each digit by $((\text{digit} + 7) \bmod 10)$.

Then, swap the first digit with the third, swap the second digit with the fourth, and print the encrypted integer.

An example session

Input (*telephone.txt*)

6254

Output:

The Encrypted Number is: 2139