

UPC Check Digit Problem

The final digit of a Universal Product Code is a check digit computed so that summing the even-numbered digits, plus 3 times the sum of the odd-numbered digits, modulo 10, is 0.



For example, take the UPC 070617006092. The sum of even numbered digits is $7+6+7+0+0+2 = 22$, and the sum of the odd-numbered digits is $0+0+1+0+6+9 = 16$. The total sum is $22+3 \times 16 = 70 = 0 \text{ modulo } 10$. So the code is valid.

The input file (**upc.txt**) will contain a number of lines of data. Each line will contain a 12 digit UPC code that has an **invalid** check digit.

The output will contain the UPC codes with the correct check digit.

Sample Input (upc.txt)

```
070617006093
036000291455
123456789097
246809753116
543210987665
```

Sample Output

```
070617006092
036000291452
123456789098
246809753116
543210987667
```