

Reverse

Write a recursive function to get the reverse of a given integer. Your function **MUST** return an integer.

Input

For each line you will given an integer n , $0 \leq n \leq 2^{31}$, terminates at EOF.

Output

For each line in input, output the reverse of n .

Example

Input:
123405
3210
1
123456789

Output:
504321
123
1
987654321