

Sum Palindrome

Given a number, reverse it and add it to itself unless it becomes a palindrome or the the count becomes 5 times. If it becomes a palindrome then print that palindrome number, otherwise print -1.

Input: First line of the input contains an integer T denoting the number of test cases. Each test case has a single line containing a number.

Output: Corresponding to each test case, print the palindrome number or -1 as stated above.

Constraints:

$1 \leq T \leq 200$

$1 \leq N \leq 1000$

Example:

Input:

2

23

30

Output:

55

33