1. Take a number, reverse it and add it to the original number until the obtained number is a palindrome.

Constraints

1<=num<=99999999

Sample Input 1

32

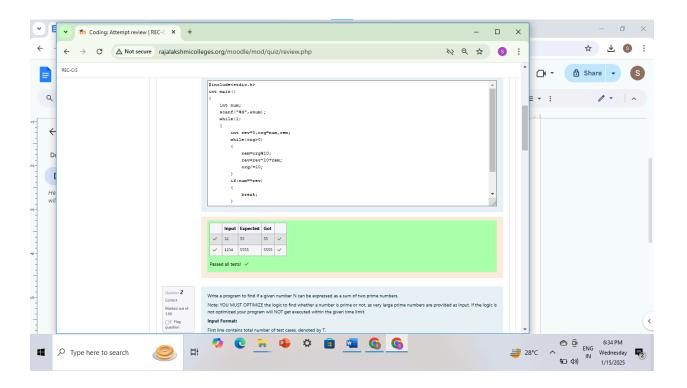
Sample Output 1

55

## For example:

Input	Result
32	55
1234	5555

Answer:(penalty regime: 0 %)



2. Write a program to find if a given number N can be expressed as a sum of two prime numbers.

Note: YOU MUST OPTIMIZE the logic to find whether a number is prime or not, as very large prime numbers are provided as input. If the logic is not optimized your program will NOT get executed within the given time limit.

## Input Format:

First line contains total number of test cases, denoted by T.

Next T lines will contain the value of N for each test case.

Output Format:

T lines containing either yes or no.

Boundary Conditions / Constraints:

1 <= T <= 25

3 <= N <= 10^9

Example Input/Output 1:

Input:

5

20

12

23

34

16

Output:

yes

yes

no

yes

yes

Explanation:

20 can be expressed as 17+3

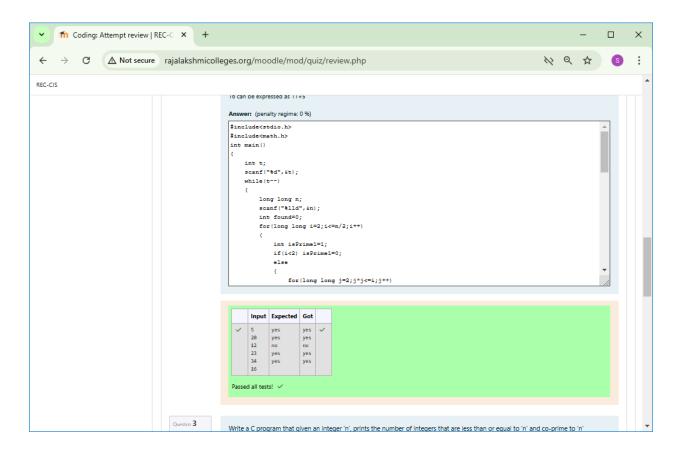
12 can be expressed as 7+5

23 cannot be expressed as sum of two primes

34 can be expressed as 31+3 or 11+23 or 17+17

16 can be expressed as 11+5

Answer:(penalty regime: 0 %)



3. Write a C program that given an integer 'n', prints the number of integers that are less than or equal to 'n' and co-prime to 'n'

Two integers a and b are said to be relatively prime or co-prime if the only positive integer that evenly divides both of them is 1. That is, the only common positive factor of the two numbers is 1. This is equivalent to their greatest common divisor being 1.

Input Format:

One line containing the value of 'n', where 1<=n<=10,000

**Output Format:** 

One line containing the number of integers that are co-prime to n and less than or equal to 'n'
Sample Test Cases
Test Case 1
Input
10
Output
4
Test Case 2
Input
23
Output
22
Test Case 3
Input
11
Output
10
Answer:(penalty regime: 0 %)

