

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

Constraints

$1 \leq \text{num} \leq 999999999$

Sample Input 1

32

Sample Output 1

55

For example:

Input	Result
32	55
1234	5555

Answer:(penalty regime: 0 %)

The screenshot shows a web browser window displaying a coding attempt review page. The URL is `rajalakshmicolleges.org/moodle/mod/quiz/review.php`. The page title is "Coding: Attempt review | REC-C". The code editor shows the following C code:

```
#include<stdio.h>
int main()
{
    int num;
    scanf("%d",&num);
    while(1)
    {
        int rev=0,org=num,zem;
        while(org>0)
        {
            zem=org%10;
            rev=rev*10+zem;
            org/=10;
        }
        if(num==rev)
        {
            break;
        }
    }
}
```

Below the code editor, there is a table showing test results:

Input	Expected	Got
32	55	55 ✓
1234	5555	5555 ✓

Below the table, it says "Passed all tests! ✓".

Question 2
Correct
Marked out of 1.00
Flag question

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.

The Windows taskbar at the bottom shows the date and time as Wednesday, 1/15/2025, 6:34 PM, and the temperature as 28°C.

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:

$1 \leq T \leq 25$

$3 \leq N \leq 10^9$

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 %)

The screenshot shows a web browser window with the address bar displaying 'Coding: Attempt review | REC-CIS' and 'rajalakshmicolleges.org/moodle/mod/quiz/review.php'. The page content includes a question titled '16 can be expressed as 11+5' with an 'Answer: (penalty regime: 0 %)' section. Below this is a code editor containing a C program that checks for co-prime numbers. A table below the code shows test results for inputs 5, 28, 12, 23, 34, and 16, all of which passed. The table has columns for 'Input', 'Expected', and 'Got'. A green bar at the bottom of the table indicates 'Passed all tests!'. At the bottom of the page, the question text is repeated: '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'.'

```
#include<stdio.h>
#include<math.h>
int main()
{
    int t;
    scanf("%d",&t);
    while(t-->0)
    {
        long long n;
        scanf("%lld",&n);
        int found=0;
        for(long long i=2;i<=n/2;i++)
        {
            int isPrime1=1;
            if(i%2) isPrime1=0;
            else
            {
                for(long long j=2;j*j<=i;j++)
```

	Input	Expected	Got	
✓	5	yes	yes	✓
	28	yes	yes	
	12	no	no	
	23	yes	yes	
	34	yes	yes	
	16			

Passed all tests! ✓

Question 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'.

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 $1 \leq n \leq 10,000$

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 %)

Coding: Attempt review | REC-CIS

Not secure rajalakshmicolleges.org/moodle/mod/quiz/review.php

REC-CIS

Answer: (penalty regime: 0 %)

```
#include <stdio.h>
int main()
{
    int n, count=0;
    scanf("%d", &n);
    for (int i=1; i<=n; i++)
    {
        int a=n, b=1, god;
        while (b!=0)
        {
            int temp=b;
            b=a%b;
            a=temp;
        }
        god=a;
        if (god==1)
        {
            count++;
        }
    }
}
```

	Input	Expected	Got	
✓	10	4	4	✓
✓	23	22	22	✓
✓	11	10	10	✓

Passed all tests! ✓

Save the state of the flags

Type here to search

28°C

ENG IN

6:36 PM Wednesday 1/15/2025