Status	Finished
Started	Thursday, 30 October 2025, 6:52 PM
Completed	Thursday, 30 October 2025, 7:22 PM
Duration	29 mins 54 secs

Question **1**

Correct

The k-digit number N is an Armstrong number if and only if the k-th power of each digit sums to N.

Given a positive integer N, return true if and only if it is an Armstrong number.

Example 1:

Input:

153

Output:

true

Explanation:

153 is a 3-digit number, and 153 = 1^3 + 5^3 + 3^3.

Example 2:

Input:

123

Output:

false

Explanation:

123 is a 3-digit number, and 123 != 1^3 + 2^3 + 3^3 = 36.

Example 3:

Input:

1634

Output:

true

Note:

1 <= N <= 10^8

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
#include<math.h>
int main()
{
    long long int num,sum=0,nod=0,rem,temp;
    scanf("%lld",&num);
    temp=num;
    while(num>0)
    {
        nod++;
        num=num/10;
    }
    num=temp;
    while(num>0)
    {
        rem=num%10;
        sum=sum+pow(rem,nod);
        num=num/10;
    }
    if(sum==temp)
    printf("true");
    else
    printf("false");
    return 0;
}
```

	Input	Expected	Got	
✓	153	true	true	✓
✓	123	false	false	✓

Passed all tests! ✓

Question **2**

Correct

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 %)

```c
#include<stdio.h>
int reverse(int n)
{
    int rev=0;
    while(n>0)
    {
        rev=rev*10+n%10;
        n=n/10;
    }
    return rev;
}
int main()
{
    int num;
    scanf("%d",&num);
    while(num!=reverse(num))
    {
        num=num+reverse(num);
    }
    printf("%d",num);
    return 0;
}
```

	Input	Expected	Got	
✓	32	55	55	✓
✓	1234	5555	5555	✓

Passed all tests! ✓

Question **3**

Correct

A number is considered lucky if it contains either 3 or 4 or 3 and 4 both in it. Write a program to print the nth lucky number. Example, 1st lucky number is 3, and 2nd lucky number is 4 and 3rd lucky number is 33 and 4th lucky number is 34 and so on. Note that 13, 40 etc., are not lucky as they have other numbers in it.

The program should accept a number 'n' as input and display the nth lucky number as output.

Sample Input 1:

3

Sample Output 1:

33

Explanation:

Here the lucky numbers are 3, 4, 33, 34., and the 3rd lucky number is 33.

Sample Input 2:

34

Sample Output 2:

33344

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
#include<math.h>
int main()
{
    int n;
    scanf("%d",&n);
    int digits=1,count=2,prevCount=0;
    while(n>count)
    {
        prevCount=count;
        digits++;
        count +=pow(2,digits);
    }
    n=n-prevCount-1;
    for(int i=digits-1;i>=0;i--)
    {
        if(n&(1<<i))
        if(n&(1<<i))
        printf("4");
        else
        printf("3");
    }
    return 0;
}
```

	Input	Expected	Got	
✓	34	33344	33344	✓

Passed all tests! ✓