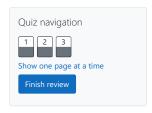
GE23131-Programming Using C-2024



	Finished Manday 22 December 2024 F22 DM			
	Monday, 23 December 2024, 5:33 PM			
	Friday, 29 November 2024, 1:03 PM			
Duratio	on 24 days 4 hours			
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.			
Marked out of 3.00 № Flag question	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 %)			

```
int a,count,b,c,rem1,arm;
scanf("%d",&a);
 6
7
8
9
          b=a;
while(b!=0)
10
               count++;
11
               b=b/10;
12
13
14
          c=a;
while(c!=0)
15
16
17
               rem1=c%10;
               arm=arm+(pow(rem1,count));
18
19
               c=c/10;
20
           if(a==arm)
21
22
               printf("true");
23
24
25
           else
26
27
28
               printf("false");
29
30
```

1	Input	Expected	Got	
:	153	true	true	
:	123	false	false	

Passed all tests!

Question 2 Correct Marked out of 5.00 Flag question

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 Sample Input 2 789 Sample Output 2 66066

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
     int main()
          long long int num, sum, rev, a,b;
scanf("%11d",&num);
while(1)
 4
5
6
7
8
9
               rev=0;
               b=num;
10
11
               while(num)
{
                   rev=rev*10+(num%10);
12
13
14
                    num=num/10;
                sum = b+rev;
15
16
17
               a=sum;
rev=0;
18
                while(sum)
19
20
                    rev=rev*10+(sum%10);
21
22
23
                    sum/=10;
                if(a==rev)
24
25
26
               num=a;
27
28
29 }
                printf("%lld",a);
```

```
Input Expected Got
32
                 55
789
      66066
                66066
```

Question **3**Correct
Marked out of 7.00

Flag question

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 %)