

240701056

REC-CIS

GE23131-Programming Using C-2024

Quiz navigation



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Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Saturday, 30 November 2024, 11:20 PM
Duration	22 days 18 hours

Question 1

Correct

Marked out of 3.00

Flag question

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

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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 $123 \neq 1^3 + 2^3 + 3^3 = 36$.

Example 3:

Input:

1634

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Output:

true

Note:

$1 \leq N \leq 10^8$

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 #include<math.h>
3 int main()
4 {
5     int n, i = 0, temp, calc;
6     scanf("%d", &n);
7     temp = n;
8     while(temp > 0)
9     {
10         calc = temp % 10;
11         temp = temp / 10;
12         i = i + 1;
13     }
14     temp = n;
15     calc = 0;
16     int sum, sum1 = 0;
17     while(temp > 0)
18     {
19         calc = temp % 10;
20         temp = temp / 10;
21         sum = pow(calc, i);
22         sum1 = sum1 + sum;
23     }
```

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```
23     }
24     if(sum1 == n)
25     {
26         printf("true");
27     }
28     else
29     {
30         printf("false");
31     }
32     return 0;
33 }
```

	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 $1 \leq \text{num} \leq 999999999$
Sample Input 1 32 Sample Output 1 55 Sample Input 2 789 Sample Output 2 66066

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int n, rn, nt = 0, i = 0;
5     scanf("%d", &n);
```

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```
6  do
7  {
8      nt = n;
9      rn = 0;
10     while(n!=0)
11     {
12         rn = rn * 10 + n % 10;
13         n = n / 10;
14     }
15     n = nt + rn;
16     i++;
17 }while(rn != nt || i == 1);
18 printf("%d", rn);
19 return 0;
20 }
```

	Input	Expected	Got	
✓	32	55	55	✓
✓	789	66066	66066	✓

Passed all tests! ✓

Question 3

Correct

Marked out of
7.00

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.

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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

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```
1 #include<stdio.h>
2 int main()
3 {
4     int n,i = 0, temp, s = 0, j = 1;
5     scanf("%d", &n);
6     while(i < n)
7     {
8         temp = j;
9         while(temp != 0)
10        {
11            s = 0;
12            if(temp%10 != 4 && temp%10 != 3)
13            {
14                s = 1;
15                break;
16            }
17            temp = temp / 10;
18        }
19        if(s == 0)
20        {
21            i = i + 1;
22        }
23        j = j + 1;
24    }
25    printf("%d", j - 1);
26    return 0;
27 }
```

	Input	Expected	Got	
✓	34	33344	33344	✓

Passed all tests! ✓