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/ [Problem 5: Finding Complexity using counter method](#)

**Started on** Friday, 9 August 2024, 2:36 PM

**State** Finished

**Completed on** Friday, 9 August 2024, 2:40 PM

**Time taken** 4 mins

**Marks** 1.00/1.00

**Grade** 10.00 out of 10.00 (100%)

Question **1**

Correct

Mark 1.00 out of 1.00

Convert the following algorithm into a program and find its time complexity using counter method.

```
void reverse(int n)
{
    int rev = 0, remainder;
    while (n != 0)
    {
        remainder = n % 10;
        rev = rev * 10 + remainder;
        n/= 10;
    }
    print(rev);
}
```

**Note:** No need of counter increment for declarations and scanf() and count variable printf() statements.

**Input:**

A positive Integer n

**Output:**

Print the value of the counter variable

**Answer:**

```
1 #include<stdio.h>
2 void reverse(int n)
3 {
4     int c=0;
5     int rev = 0, remainder;
6     c++;
7     c++;
8     while (n != 0)
9     {
10        c++;
11        remainder = n % 10;
12        c++;
13        rev = rev * 10 + remainder;
14        c++;
15        n/= 10;
16    }
```

```
16         c++;
17     }
18 }
19 c++;
20 printf("%d",c);
21 }
22 int main()
23 {
24     int n;
25     scanf("%d",&n);
26     reverse(n);
27 }
```

	Input	Expected	Got	
✓	12	11	11	✓
✓	1234	19	19	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

◀ Problem 4: Finding Complexity using Counter Method

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1-G-Coin Problem ▶