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Started on	Tuesday, 20 August 2024, 2:45 PM
State	Finished
Completed on	Tuesday, 20 August 2024, 2:50 PM
Time taken	5 mins 16 secs
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  |
2  | #include<stdio.h>
3  | void reverse(int n)
4  | {
5  |     int rev = 0, remainder;
6  |     int counter=2;
7  |     while (n != 0)
8  |     {
9  |         counter++;
10 |         remainder = n % 10;
11 |         counter++;
12 |         rev = rev * 10 + remainder;
13 |         counter++;
14 |         n/= 10;
15 |         counter++;
16 |     }
17 |     //print(rev);
18 |     counter++;
19 |     printf("%d",counter);
20 |
21 | }
22 | int main(){
23 |     int n;
24 |     scanf("%d",&n);
25 |     reverse( n);
26 | }
```

	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 ▶