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

	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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