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Started on	Friday, 9 August 2024, 2:46 PM
State	Finished
Completed on	Friday, 9 August 2024, 2:47 PM
Time taken	20 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 void reverse(int n)
3 {
4     int c=0;
5     int rev = 0, remain;
6     c++;
7     while (n != 0)
8     {
9         c++;
10        remain = n % 10;
11        c++;
12        rev = rev * 10 + remain;
13        c++;
14        n/= 10;
15        c++;
16    }
17    c++;
18    //printf(rev);
19    c++;
20    printf("%d",c);
21 }
22 int main(){
23     int n;
24     scanf("%d",&n);
25     reverse(n);
26 }
27
28
```

	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](#)[1-G-Coin Problem ▶](#)