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

Started on	Friday, 9 August 2024, 2:26 PM
State	Finished
Completed on	Friday, 9 August 2024, 2:29 PM
Time taken	2 mins 41 secs
Marks	1.00/1.00
Grade	10.00 out of 10.00 (100%)

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 rev = 0, remainder,c=0;
5      c++;
6      c++;
7      while (n != 0)
8      {
9          c++;
10         remainder = n % 10;
11         c++;
12         rev = rev * 10 + remainder;
13         c++;
14         n/= 10;
15         c++;
16     }
17     c++;
18     printf("%d",c);
19 }
20 int main(){
21     int n;
22     scanf("%d",&n);
23     reverse(n);
24 }
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.