

[Dashboa...](#) / [My cour...](#) / [CS23331-DAA-2023-...](#) / [Finding Time Complexity of Algorit...](#) / [Problem 5: Finding Complexity using counter me...](#)

Started on	Monday, 19 August 2024, 10:16 AM
State	Finished
Completed on	Monday, 19 August 2024, 10:24 AM
Time taken	7 mins 15 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 reverse(int n,int count)
3  {
4      int rev = 0, remainder;
5      count++;
6      while (n != 0)
7      {
8          count++;
9          remainder = n % 10;
10         count++;
11         rev = rev * 10 + remainder;
12         count++;
13         n/= 10;
14         count++;
15     }
16     count++;
17     count++;
18     //printf(rev);
19     return count;
20 }
21
22 int main(){
23     int n,count=0;
24     scanf("%d",&n);
25     count+=reverse(n,count);
26     printf("%d",count);
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](#)

Jump to...

[1-G-Coin Problem ▶](#)