

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

Started on	Tuesday, 20 August 2024, 1:57 PM
State	Finished
Completed on	Tuesday, 20 August 2024, 2:00 PM
Time taken	2 mins 56 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 rev = 0, remainder;
5      int counter=0;
6      counter=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     }counter++;
17     printf("%d",counter);
18 }
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.

◀ [Problem 4: Finding Complexity using Counter Method](#)

Jump to...

[1-G-Coin Problem](#) ►