

# CS23331-Design and Analysis of Algorithms-2023 Batch-CS

## Quiz navigation

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Status	Finished
Started	Sunday, 23 February 2025, 4:48 PM
Completed	Sunday, 23 February 2025, 5:02 PM
Duration	13 mins 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

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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,rem,count=1;
5     while(n!=0)
6     {
7         count++;
8         rem=n%10;
9         count++;
10        rev=rev*10+rem;
11        count++;
12        n/=10;
13        count++;
14    }
15    count++;
16    // print(rev);
17    count++;
18    printf("%d",count);
19 }
20 int main()
21 {
22     int n;
23     scanf("%d",&n);
24     reverse (n);
25     return 0;
26 }
```

	Input	Expected	Got	
	12	11	11	
	1234	19	19	

Passed all tests!

**Correct**  
Marks for this submission: 1.00/1.00.

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

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[1-Number of Zeros in a Given Array ▶](#)