

Started on Monday, 4 August 2025, 4:34 PM

State Finished

Completed on Monday, 4 August 2025, 4:40 PM

Time taken 5 mins 36 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:

[Reset answer](#)

```
1  #include<stdio.h>
2  int reverse(int n)
3  {
4      int counter = 0;
5      int rev = 0, remainder;
6      counter++;
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(rev);
18     counter++;
19     return counter;
20 }
21 int main()
22 {
23     int n;
24     scanf("%d",&n);
25     int ans = reverse(n);
26     printf("%d",ans);
27 }
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.