

Started on Thursday, 31 July 2025, 9:16 AM

State Finished

Completed on Thursday, 31 July 2025, 9:20 AM

Time taken 4 mins 10 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 void reverse(int);
3 int main()
4 {
5     int n;
6     scanf("%d",&n);
7     reverse(n);
8 }
9 void reverse(int n)
10 {
11     int count=0;
12     int rev = 0, remainder;
13     count++;
14     count++;
15     while (n != 0)
16     {
17         count++;
18         remainder = n % 10;
19         count++;
20         rev = rev * 10 + remainder;
21         count++;
22         n/= 10;
23         count++;
24     }
25     //printf(rev);
26     count++;
27     printf("%d",count);
28 }
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.