

Started on Monday, 4 August 2025, 4:37 PM

State Finished

Completed on Monday, 4 August 2025, 4:43 PM

Time taken 5 mins 33 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 n){
3     int c=0;
4     int rev = 0, remainder;
5     c++;
6     while (n != 0)  {
7         c++;
8         remainder = n % 10;
9         c++;
10        rev = rev * 10 + remainder;
11        c++;
12        n/= 10;
13        c++;
14    }
15    c++;
16    //printf(rev);
17    c++;
18    printf("%d",c);
19 }
20 int main(){
21     int n;
22     scanf("%d",&n);
23     reverse(n);
24 }
```

	Input	Expected	Got	
✓	12	11	11	✓

	Input	Expected	Got	
✓	1234	19	19	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.