



Started on	Sunday, 17 August 2025, 7:54 PM
State	Finished
Completed on	Sunday, 17 August 2025, 7:57 PM
Time taken	2 mins 34 secs
Marks	1.00/1.00
Grade	10.00 out of 10.00 (100%)

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

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

[Back to Course](#)