



Started on Sunday, 31 August 2025, 10:27 AM

State Finished

Completed on Sunday, 31 August 2025, 10:32 AM

Time taken 5 mins 14 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      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     c++;
17     printf("%d",c);
18 }
19
20 int main(){
21     int n;
22     scanf("%d",&n);
23     reverse(n);
24 }
```

	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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