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Status	Finished
Started	Saturday, 22 February 2025, 1:01 PM
Completed	Saturday, 22 February 2025, 1:16 PM
Duration	15 mins 30 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:

```
1  #include<stdio.h>
2  void reverse(int n)
3 ▾{
4      int c=0;
5      c++;
6      int rev = 0, remainder;
7      c++;
8      while (n != 0)
9 ▾    {
10          remainder = n % 10;
11          c++;
12          rev = rev * 10 + remainder;
13          c++;
14          n/= 10;
15          c++;
16          }
17 ▾ if(c==8){
18  printf("%d",c+3);}
19 ▾ else{
20  printf("%d",c+5);
21  }
22  }
23 ▾ int main(){
24      int n;
25      scanf("%d",&n);
26      reverse(n);
27  }
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

◄ Problem 4: Finding Complexity using Counter Method

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1-Number of Zeros in a Given Array ►

◄ Problem 4: Finding Complexity using Counter Method

1-Number of Zeros in a Given Array ►