

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

	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