

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 c=0;
3 | void reverse(int n)
4 | {
5 |     int rev = 0, remainder;
6 |     c++;
7 |     while (n != 0)
8 |     {
9 |         c++;
10 |
11 |         remainder = n % 10;
12 |         c++;
13 |         rev = rev * 10 + remainder;
14 |         c++;
15 |         n/= 10;
16 |         c++;
17 |
18 |     }c++;
19 |     //print(rev);
20 |     c++;
21 |     printf("%d",c);
22 |
23 | }
24 | int main(){
25 |     int n;
26 |     scanf("%d",&n);
27 |     reverse(n);
28 | }
29 |
```

	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](#)[1-G-Coin Problem ▶](#)