Started on	Tuesday, 3 September 2024, 1:57 PM
State	Finished
Completed on	Tuesday, 3 September 2024, 1:58 PM
Time taken	55 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  int reverse(int n)
3 ▾{
4   int c = 0;
5   int rev = 0, remainder;
6   c+=2;
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   return c;
18 }
19 ▾int main(){
20   int n;
21   scanf("%d", &n);
22   int tc = reverse(n);
23   printf("%d", tc);
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

Jump to…