CS23331-DAA-2024-CSE / Problem 5: Finding Complexity using counter method

Problem 5: Finding Complexity using counter method

Started on	Wednesday, 27 August 2025, 9:42 PM
State	Finished
Completed on	Wednesday, 27 August 2025, 9:55 PM
Time taken	13 mins 7 secs
Marks	1.00/1.00
Grade	**10.00** out of 10.00 (**100**%)

Question 1 | Correct   Mark 1.00 out of 1.00   ⚑ Flag question

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

	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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