Problem 5: Finding Complexity using counter method

Started on	Wednesday, 20 August 2025, 8:40 AM
State	Finished
Completed on	Wednesday, 20 August 2025, 8:45 AM
Time taken	4 mins 23 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:

```c
#include<stdio.h>
int reverse(int n)
{
   int rev = 0, remainder;
   int c=0;
   c++;
   c++;
   while (n != 0)
    {
        c++;
        c++;
        remainder = n % 10;
        rev = rev * 10 + remainder;
        n/= 10;
        c++;
        c++;
    }
    c++;
    return c++;
}
int main(){
    int n;
    scanf("%d",&n);
    int b = reverse(n);
    printf("%d",b);
    return 0;
}
```

	Input	Expected	Got	
✔	12	11	11	✔
✔	1234	19	19	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Finish review

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