RAJALAKSHMI ENGINEERING COLLEGE

Started on	Tuesday, 26 August 2025, 1:56 PM
State	Finished
Completed on	Tuesday, 26 August 2025, 2:01 PM
Time taken	4 mins 24 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:

```c
#include<stdio.h>
int reverse_and_count(int n){
    int rev=0,remainder;
    int count=0;
    count+=3;
    while(n!=0){
        remainder=n%10;     count++;
        rev=rev*10;         count++;
        rev=rev+remainder;  count++;
        n=n/10;             count++;
    }
    return count;
}
int main(){
    int n;
    scanf("%d",&n);
    int count=reverse_and_count(n);
    printf("%d\n",count);
    return 0;
}
```

	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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