**RAJALAKSHMI
ENGINEERING
COLLEGE**

🔔⁷   **RAKSHITA N 2024-IT** ˅   **R2**

Started on	Tuesday, 18 November 2025, 3:15 PM
State	Finished
Completed on	Tuesday, 18 November 2025, 3:17 PM
Time taken	2 mins 16 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
3  int main() {
4      int n;
5      scanf("%d", &n);
6
7      int rev = 0, remainder;
8      long long counter = 0;
9
10     while (n != 0) {
11         remainder = n % 10;
12         counter++;
13
14         rev = rev * 10 + remainder;
15         counter += 2;
16
17         n /= 10;
18         counter++;
19     }
20
21     counter += 3;
22
23     printf("%lld", counter);
24     return 0;
25 }
26
```

	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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