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

Problem 5: Finding Complexity using counter method

Started on	Thursday, 21 August 2025, 8:52 PM
State	Finished
Completed on	Thursday, 21 August 2025, 8:56 PM
Time taken	4 mins 11 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
 3  int main(void) {
 4      long long n, cnt = 0;
 5      if (scanf("%lld", &n) != 1) return 0;
 6
 7      long long rev, remainder;
 8      rev = 0; cnt++;
 9
10      while ((cnt++, n != 0)) {
11          remainder = n % 10; cnt++;
12          rev = rev * 10 + remainder; cnt++;
13          n /= 10; cnt++;
14      }
15
16      cnt++;
17      printf("%lld", cnt);
18      return 0;
19  }
20
```

	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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