## Dashboa... / My cour... / CS23331-DAA-2023-... / Finding Time Complexity of Algorit... / Problem 5: Finding Complexity using counter me...

Started on	Tuesday, 20 August 2024, 2:54 PM
State	Finished
Completed on	Tuesday, 20 August 2024, 2:59 PM
Time taken	5 mins 21 secs
Marks	1.00/1.00
Grade	<b>10.00</b> out of 10.00 ( <b>100</b> %)

```
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:

```
#include<stdio.h>
 2 void reverse(int n)
 3 ▼ {int count=0;
 4
       int rev = 0, remainder;
 5
       count++;
 6
       while (n != 0)
 7
        {count++;
            remainder = n % 10;
 8
 9
            count++;
            rev = rev * 10 + remainder;
10
11
            count++;
12
            n/= 10;
13
            count++;
14
15
        }count++;
16
    //print(rev);
17
    count++;
    printf("%d",count);
18
19
20
   int main()
21 ▼ {
22
        int n;
        scanf("%d",&n);
23
24
        reverse(n);
25
26 }
```

	Input	Expected	Got	
~	12	11	11	~
~	1234	19	19	~

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

→ Problem 4: Finding Complexity using Counter Method

Jump to...

1-G-Coin Problem ►