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

Started on	Friday, 16 August 2024, 11:42 AM
State	Finished
Completed on	Monday, 19 August 2024, 8:10 AM
Time taken	2 days 20 hours
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:

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

	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 ►