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

Started on	Tuesday, 20 August 2024, 2:56 PM
State	Finished
Completed on	Tuesday, 20 August 2024, 6:40 PM
Time taken	3 hours 43 mins
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  void reverse(int n)
3 ▾{
4      int rev = 0, remainder;
5      int count=2;
6      while (n != 0)
7 ▾    {
8          count++;
9          remainder = n % 10;
10         count++;
11         rev = rev * 10 + remainder;
12         count++;
13         n/= 10;
14         count++;
15
16     }
17 //printf(rev);
18 count++;
19 printf("%d",count);
20 }
21 ▾int main(){
22     int n;
23     scanf("%d",&n);
24     reverse(n);
25 }
```

	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 ►

Correct

Marks for this submission: 1.00/1.00.