CS23331-Design and Analysis of Algorithms-2023 Batch-CSE

Quiz navigation

1

Finish review

Started on	Tuesday, 13 August 2024, 2:03 PM
State	Finished
Completed on	Tuesday, 13 August 2024, 2:09 PM
Time taken	6 mins 24 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:

```c
#include<stdio.h>
int main(){
    int n,count=0;

    scanf("%d",&n);

    int reverse(int n){
        count++;
        int rev=0,remainder;
        count++;
        while(n!=0){
            count++;
        remainder=n%10;
            count++;
        rev=rev*10+remainder;
          count++;
         n/=10;
           count++;
        }
        count++;
        //printf("%d",rev);
        return count;
    }
    printf("%d",reverse(n));
}
```

	Input	Expected	Got	
✔	12	11	11	✔
✔	1234	19	19	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Finish review

Counter Method