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

Quiz navigation

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Finish review

Started on	Tuesday, 13 August 2024, 1:30 PM
State	Finished
Completed on	Tuesday, 13 August 2024, 1:45 PM
Time taken	15 mins 23 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 the counter method.

```
void function (int n)
{
    int i= 1;

    int s =1;

    while(s <= n)
    {
         i++;
         s += i;
     }
}
```

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

For example:

Input	Result
9	12

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int main(){
    int n,count=0;
    scanf("%d",&n);
    count++;
    int function(int n){
        int i=1,s=1;
        count++;
        count++;
        while(s<=n){
            count++;
            i++;
            count++;
            s+=i;
            count++;
        }

        return count;    }
    printf("%d",function(n));

}
```

	Input	Expected	Got	
✔	9	12	12	✔
✔	4	9	9	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Finish review

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Problem 2: Finding Complexity using Counter method ►