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

Quiz navigation

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Finish review

Status	Finished
Started	Sunday, 23 February 2025, 4:08 PM
Completed	Sunday, 23 February 2025, 4:21 PM
Duration	13 mins 1 sec
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>
void function(int n)
{
    int count=0;
    int i=1;
    count++;
    int s=1;
    count++;
    while(s<=n)
    {
        count++;
        i++;
        count++;
        s+=i;
        count++;
    }
    count++;
    printf("%d",count);
}
int main()
{
    int n;
    scanf("%d",&n);
    function( n);
    return 0;
}
```

	Input	Expected	Got	
	9	12	12	
	4	9	9	

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

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