Dashbo... / My cour... / CS23331-DAA-2023-... / Finding Time Complexity of Algorit... / Problem 2: Finding Complexity using Counter me...

Started on	Thursday, 8 August 2024, 11:23 AM
State	Finished
Completed on	Thursday, 8 August 2024, 11:41 AM
Time taken	18 mins 8 secs
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 the counter method.
```
void func(int n)
{
    if(n==1)
    {
      printf("*");
    }
    else
    {
     for(int i=1; i<=n; i++)
     {
       for(int j=1; j<=n; j++)
       {
          printf("*");
          printf("*");
          break;
       }
     }
    }
}
```

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: (penalty regime: 0 %)

```
 1  #include<stdio.h>
 2  int func(int n,int count)
 3  {
 4      count++;
 5      if(n==1)
 6      {
 7        printf("*");
 8        count++;
 9      }
10      else
11      {
12       for(int i=1; i<=n; i++)
13       {
14          count++;
15          for(int j=1; j<=n; j++)
16          {
17             count++;
18             //printf("*");
19             count++;
20             //printf("*");
21             count++;
22             break;
23          }
24          count++;
25       }
26       count++;
27      }
28      return count;
29  }
30  int main(){
31      int n,count=0;
32      scanf("%d",&n);
33      count+=func(n,count);
34      printf("%d",count);
35      return 0;
36  }
```

	Input	Expected	Got	
✔	2	12	12	✔
✔	1000	5002	5002	✔
✔	143	717	717	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

◄ Problem 1: Finding Complexity using Counter Method

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Problem 3: Finding Complexity using Counter Method ►