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<b>Started on</b>	Tuesday, 20 August 2024, 1:37 PM
<b>State</b>	Finished
<b>Completed on</b>	Tuesday, 20 August 2024, 1:57 PM
<b>Time taken</b>	20 mins 2 secs
<b>Marks</b>	1.00/1.00
<b>Grade</b>	<b>10.00</b> out of 10.00 ( <b>100%</b> )

## 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 function(int n)
{
    int c= 0;
    for(int i=n/2; i<n; i++)
        for(int j=1; j<n; j = 2 * j)
            for(int k=1; k<n; k = k * 2)
                c++;
}

```

**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 function(int n)
3  {
4      int c= 0;
5      int count=0;
6      count++;
7      int i,j,k;
8      for(i=n/2; i<n; i++){
9          count=count+1;
10         for(j=1; j<n; j = 2 * j){
11             count=count+1;
12             for(k=1; k<n; k = k * 2){
13                 count=count+1;
14                 c++;
15                 count++;
16             }
17             count++;
18         }
19         count++;
20     }
21     count++;
22     printf("%d",count);
23 }
24 int main(){
25     int n;
26     scanf("%d",&n);
27     function(n);
28 }

```

	Input	Expected	Got	
✓	4	30	30	✓
✓	10	212	212	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

[◀ Problem 3: Finding Complexity using Counter Method](#)

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