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<b>Started on</b>	Friday, 9 August 2024, 2:27 PM
<b>State</b>	Finished
<b>Completed on</b>	Friday, 9 August 2024, 2:37 PM
<b>Time taken</b>	10 mins 9 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 c1=0;
5
6      int c= 0;
7      c1++;
8      for(int i=n/2; i<n; i++)
9      {
10         c1++;
11
12         for(int j=1; j<n; j = 2 * j)
13         {
14             c1++;
15
16             for(int k=1; k<n; k = k * 2)
17             {
18                 c1++;
19                 c++;
20                 c1++;
21             }
22             c1++;
23         }c1++;
24     }c1++;
25     printf("%d",c1);
26 }
27
28 int main(){
29     int n;
30     scanf("%d",&n);
31     function(n);
32 }

```

	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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[Problem 5: Finding Complexity using counter method ▶](#)