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<b>Started on</b>	Monday, 19 August 2024, 10:12 AM
<b>State</b>	Finished
<b>Completed on</b>	Monday, 19 August 2024, 10:19 AM
<b>Time taken</b>	6 mins 51 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  int main(){
3      int n;
4      scanf("%d",&n);
5      int c= 0,cnt=0;
6      cnt++;
7      for(int i=n/2; i<n; i++,cnt++){
8          cnt++;
9          for(int j=1; j<n; j = 2 * j,cnt++){
10             cnt++;
11             for(int k=1; k<n; k = k * 2,cnt++){
12                 c++;cnt++;
13             }
14         }
15     }
16     cnt++;
17     printf("%d",cnt);
18     return 0;
19 }
```

	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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