Started on	Tuesday, 13 August 2024, 2:49 PM
State	Finished
Completed on	Tuesday, 27 August 2024, 1:49 PM
Time taken	13 days 23 hours
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 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,a=0;
 4      scanf("%d",&n);
 5      int c=0;
 6      a++;
 7      for(int i=n/2;i<n;i++,a++){
 8          for(int j=1;j<n;j=2*j,a++){
 9              for(int k=1;k<n;k=k*2,a++){
10                  c++;
11                  a++;
12              }
13              a++;
14          }
15          a++;
16      }
17      a++;
18      printf("%d",a);
19      a++;
20  }
```

	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

Jump to...

Problem 5: Finding Complexity using counter method ►