Started on	Friday, 9 August 2024, 2:43 PM
State	Finished
Completed on	Friday, 9 August 2024, 2:45 PM
Time taken	1 min 42 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 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:

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

	Input	Expected	Got	
✔	4	30	30	✔
✔	10	212	212	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Jump to...