Started on	Thursday, 31 July 2025, 9:21 AM
State	Finished
Completed on	Thursday, 31 July 2025, 9:33 AM
Time taken	12 mins 19 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:

Reset answer

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