**RAJALAKSHMI
ENGINEERING
COLLEGE**

🔔 7 **SIVA S 2024-CSE** ⌄   **S2**

Started on	Wednesday, 20 August 2025, 4:12 PM
State	Finished
Completed on	Sunday, 31 August 2025, 11:59 AM
Time taken	10 days 19 hours
Marks	0.00/1.00
Grade	**0.00** out of 10.00 (**0**%)

Question 1 Incorrect Mark 0.00 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
3  int main() {
4      int n;
5      scanf("%d", &n);
6
7      int counter = 0;
8
9      for (int i = n / 2; i < n; i++) {
10         for (int j = 1; j < n; j = 2 * j) {
11             for (int k = 1; k < n; k = k * 2) {
12                 counter++; // count only the innermost operation
13             }
14         }
15     }
16
17     printf("%d\n", counter);
18     return 0;
19 }
20
```

	Input	Expected	Got	
✖	4	30	8	✖
✖	10	212	80	✖

Your code must pass all tests to earn any marks. Try again.

Show differences

Incorrect

Marks for this submission: 0.00/1.00.

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