

CS23331-Design and Analysis of Algorithms-2023 Batch-CS

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Quiz navigation

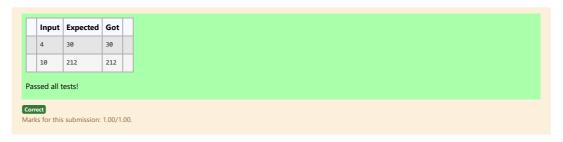


Finish review

```
Status Finished
          Started Sunday, 23 February 2025, 4:34 PM
       Completed Sunday, 23 February 2025, 4:48 PM
         Duration 13 mins 50 secs
            Marks 1.00/1.00
            Grade 10.00 out of 10.00 (100%)
Question 1
```

Correct Mark 1.00 out of Flag question

```
Convert the following algorithm into a program and find its time
complexity using counter method.
void function(int n)
    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>
        void function(int n)
            int count=1,c=0;
            for(int i=n/2;i<n;i++)</pre>
                count++;
for(int j=1;j<n;j=2*j)</pre>
                10
   11
   12
                    {
count++;
   13
14
                        c++;
count++;
   15
   16
   17
18
                     count++;
  19
20
21
                 count++;
            count++;
printf("%d",count);
   22
  23
24
25
            int n;
scanf("%d",&n);
function(n);
   26
   27
   28
   29
            return 0;
```



Finish review

→ Problem 3: Finding Complexity using Counter Method

ump to	‡

Problem 5: Finding Complexity using counter method -