

> General
↳ BASIC C PROGRAMMING
↳ Problem 1: Finding Complexity
↳ Problem 2: Finding Complexity
↳ Problem 3: Finding Complexity
↳ Problem 4: Finding Complexity
↳ Problem 5: Finding Complexity
↳ Divide and Conquer
↳ 1-Number of Zeros in a Given Number
↳ 2-Majority Element
↳ 3-Finding Floor Value
↳ 4-Two Elements sum to x
↳ 5-Implementation of Quick Sort
↳ Greedy Algorithms
↳ 1-G-Coin Problem
↳ 2-G-Cookies Problem
↳ 3-G-Burger Problem
↳ 4-G-Array Sum max problem
↳ 5-G-Product of Array elements
↳ Dynamic Programming
↳ 1-DP-Playing with Numbers
↳ 2-DP-Playing with chessboard
↳ 3-DP-Longest Common Subsequence
↳ 4-DP-Longest non-decreasing subsequence
↳ Competitive Programming
↳ 1-Finding Duplicates-O(n^2)
↳ 2-Finding Duplicates-O(n) Time
↳ 3-Print Intersection of 2 sorted arrays
↳ 4-Print Intersection of 2 sorted arrays

Problem 1: Finding Complexity using Counter Method

Started on Sunday, 17 August 2025, 10:58 PM

State Finished

Completed on Sunday, 17 August 2025, 11:26 PM

Time taken 27 mins 55 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 the counter method.

```
void function (int n)
{
    int i=1;
    int s=1;

    while(s <= n)
    {
        i++;
        s += i;
    }
}
```

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

For example:

Input	Result
9	22

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int n;
5     scanf("%d",&n);
6     int i=1;
7     int counter=0;
8     while(i<=n)
9     {
10         i++;
11         counter++;
12         s+=i;
13         i++;
14         counter++;
15     }
16     counter++;
17     printf("%d",counter);
18 }
```

Passed all testcases!

Correct

Marks for this submission: 1.00/1.00.

[Finish review](#)

[Back to Course](#)

> General
↳ BASIC C PROGRAMMING
↳ Problem 1: Finding Complexity
↳ Problem 2: Finding Complexity
↳ Problem 3: Finding Complexity
↳ Problem 4: Finding Complexity
↳ Problem 5: Finding Complexity
↳ Divide and Conquer
↳ 1-Number of Zeros in a Given Number
↳ 2-Majority Element
↳ 3-Finding Floor Value
↳ 4-Two Elements sum to x
↳ 5-Implementation of Quick Sort
↳ Greedy Algorithms
↳ 1-G-Coin Problem
↳ 2-G-Cookies Problem
↳ 3-G-Burger Problem
↳ 4-G-Array Sum max problem
↳ 5-G-Product of Array elements
↳ Dynamic Programming
↳ 1-DP-Playing with Numbers
↳ 2-DP-Playing with chessboard
↳ 3-DP-Longest Common Subsequence
↳ 4-DP-Longest non-decreasing subsequence
↳ Competitive Programming
↳ 1-Finding Duplicates-O(n^2) Time Complexity
↳ 2-Finding Duplicates-O(n) Time Complexity
↳ 3-Print Intersection of 2 sorted arrays
↳ 4-Print Intersection of 2 sorted arrays

CSE2311-CDA-2024-CSE / Problem 1: Finding Complexity using Counter Method

Problem 1: Finding Complexity using Counter Method

Started on Sunday, 17 August 2025, 10:58 PM

State Finished

Completed on Sunday, 17 August 2025, 11:26 PM

Time taken 27 mins 55 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 the counter method.

```
void function (int n)
{
    int i=1;
    int s=1;

    while(s <= n)
    {
        i++;
        s += i;
    }
}
```

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

For example:

Input	Result
9	22

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int n;
5     scanf("%d",&n);
6     int i=1;
7     int counter=0;
8     while(i<=n)
9     {
10         i++;
11         counter++;
12         s+=i;
13         i++;
14         counter++;
15     }
16     counter++;
17     printf("%d",counter);
18 }
```

Passed all testcases!

Correct

Marks for this submission: 1.00/1.00.

Finish review

[Back to Course](#)

Data retention summary

General
BASIC C PROGRAMMING
BASIC C PROGRAMMING-PR...
Finding Time Complexity ...
Problem 1: Finding Complex...
Problem 2: Finding Complex...
Problem 3: Finding Complex...
Problem 4: Finding Complex...
Problem 5: Finding Complex...
Divide and Conquer
1-Number of Zeros in a Give...
2-Majority Element
3-Finding Floor Value
4-Two Elements sum to x
5-Implementation of Quick ...
Greedy Algorithms
1-G-Coin Problem
2-G-Cookies Problem
3-G-Burger Problem
4-G-Array Sum max problem
5-G-Product of Array elem...
Dynamic Programming
1-DP-Playing with Numbers

Dashboard My courses Q

CS23331-DAA-2024-CSE / Problem 3: Finding Complexity using Counter Method

Problem 3: Finding Complexity using Counter Method

Started on	Friday, 22 August 2025, 9:20 PM
State	Finished
Completed on	Friday, 29 August 2025, 2:41 PM
Time taken	6 days 17 hours
Marks	1.00/1.00
Grade	10.00 out of 10.00 (100%)

Question 1 | Correct Mark 1.00 out of 1.00 Flag question

Convert the following algorithm into a program and find its time complexity using counter method.

```
Factor(num) {
    for (i = 1; i <= num; ++i)
    {
        if (num % i == 0)
        {
            printf("%d ", i);
        }
    }
}
```

Note: No need of counter increment for declarations and scanf() and counter variable printf() statement.

Input:
A positive Integer n
Output:
Print the value of the counter variable

Answer:

```
1 #include<stdio.h>
2 int main()
3 {
4     int num,i;
5     int counter=0;
6     scanf("%d",&num);
7     for(i=1;i<=num;i++){
8         counter++;
9         counter++;
10        if(num%i==0){
11            counter++;
12        }
13        counter++;
14        printf("%d",counter);
15 }
```

	Input	Expected	Got	
✓	12	31	31	✓
✓	25	54	54	✓
✓	4	12	12	✓

Passed all tests! ✓

Correct
Marks for this submission: 1.00/1.00.

[Finish review](#)

[Back to Course](#)

Data retention summary

Problem 4: Finding Complexity using Counter Method

Started on	Friday, 29 August 2025, 2:08 PM
State	Finished
Completed on	Friday, 29 August 2025, 2:41 PM
Time taken	32 mins 51 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:

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

Input	Expected	Got	
✓ 4	30	30 ✓	
✓ 10	212	212 ✓	

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

[Finish review](#)

[Back to Course](#)

> General
BASIC C PROGRAMMING
BASIC C PROGRAMMING-PR...
Finding Time Complexity ...
Problem 1: Finding Complex...
Problem 2: Finding Complex...
Problem 3: Finding Complex...
Problem 4: Finding Complex...
Problem 5: Finding Complex...
Divide and Conquer
1-Number of Zeros in a Give...
2-Majority Element
3-Finding Floor Value
4-Two Elements sum to x
5-Implementation of Quick ...
Greedy Algorithms
1-G-Coin Problem
2-G-Cookies Problem
3-G-Burger Problem
4-G-Array Sum max problem
5-G-Product of Array elem...
Dynamic Programming
1-DP-Playing with Numbers

Problem 5: Finding Complexity using counter method

Started on	Friday, 29 August 2025, 2:15 PM
State	Finished
Completed on	Friday, 29 August 2025, 2:42 PM
Time taken	26 mins 37 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 reverse(int n)
{
    int rev = 0, remainder;
    while (n != 0)
    {
        remainder = n % 10;
        rev = rev * 10 + remainder;
        n /= 10;

    }
    print(rev);
}
```

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 rev=0,remainder,counter=0,n;
4     scanf("%d",&n);
5     counter++;
6     counter++;
7     while(n!=0){
8         counter++;
9         remainder=n%10;
10        counter++;
11        rev=rev*10+remainder;
12        counter++;
13        n/=10;
14        counter++;
15    }
16    counter++;
17    printf("%d",counter);
18 }
```

Input	Expected	Got
✓ 12	11	11 ✓
✓ 1234	19	19 ✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

[Finish review](#)

[Back to Course](#)