<u>Dashbo</u>... / <u>My cour</u>... / <u>CS23331-DAA-2023-A</u>... / <u>Finding Time Complexity of Algorit</u>... / <u>Problem 1: Finding Complexity using Counter Me</u>...

Started on	Tuesday, 20 August 2024, 1:50 PM
State	Finished
Completed on	Tuesday, 20 August 2024, 1:56 PM
Time taken	6 mins 29 secs
Marks	1.00/1.00
C . I.	40.00 - 1 - (10.00 (4000))

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++;</pre>
```

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

Input:

A positive Integer n

s += i;

Output:

Print the value of the counter variable

For example:

Input	Result
9	12

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
 1
 2 v int main(){
 3
        int n;
        int count=0;
 4
 5
        scanf("%d",&n);
        int i=1;
 6
 7
        count++;
 8
        int s=1;
9
        count++;
10
        while(s<=n)</pre>
11 •
        {
             count++;
12
            i++;
13
14
             count++;
15
             s+=i;
16
             count++;
17
18
        count++;
        printf("%d",count);
19
20
        return 0;
21
```

	Input	Expected	Got	
~	9	12	12	~
~	4	9	9	~

Passed all tests! 🗸

Correct

Marks for this submission: 1.00/1.00.

■ BASIC C PROGRAMMING-PRACTICE

Jump to...

Problem 2: Finding Complexity using Counter method ►

<u>Dashbo</u>... / <u>My cour</u>... / <u>CS23331-DAA-2023-A</u>... / <u>Finding Time Complexity of Algorit</u>... / <u>Problem 2: Finding Complexity using Counter me</u>...

Started on	Tuesday, 20 August 2024, 1:58 PM
State	Finished
Completed on	Tuesday, 20 August 2024, 2:28 PM
Time taken	29 mins 59 secs
Marks	1.00/1.00
6	40.00 - 1 - 540.00 (4000)

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 func(int n)
    if(n==1)
    {
     printf("*");
    else
    {
     for(int i=1; i<=n; i++)
       for(int j=1; j<=n; j++)</pre>
          printf("*");
          printf("*");
          break;
       }
     }
  }
}
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: (penalty regime: 0 %)

```
#include<stdio.h>
 2
   int main()
 3 ▼ {
         int n;
scanf("%d",&n);
 4
 5
         int count=0;
 6
 7
         if(n==1)
 8 ,
         {
 9
           count++;
10
           count++;
         }
11
12
         else
13
         {
14
             count++;
15
16
          for(int i=1; i<=n; i++)</pre>
17
18
              count++;
19
20
             for(int j=1; j<=n; j++)</pre>
21
22
               count++;
23
               count++;
               break;
24
25
               count++;
26
27
            count++;
28
29
          count++;
30
        }
31
32
        count++;
        printf("%d",count);
33
        return 0;
34
35
     }
```

	Input	Expected	Got	
~	2	12	12	~
~	1000	5002	5002	~
~	143	717	717	~

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

■ Problem 1: Finding Complexity using Counter Method

Jump to...

Problem 3: Finding Complexity using Counter Method ►

<u>Dashbo</u>... / <u>My cour</u>... / <u>CS23331-DAA-2023-A</u>... / <u>Finding Time Complexity of Algorit</u>... / <u>Problem 3: Finding Complexity using Counter Me</u>...

Started on	Tuesday, 20 August 2024, 2:32 PM
State	Finished
Completed on	Tuesday, 20 August 2024, 2:35 PM
Time taken	3 mins 30 secs
Marks	1.00/1.00
Grade	10.00 out of 10.00 (100 %)

```
Question 1
Correct
Mark 1.00 out of 1.00
```

Answer:

```
#include <stdio.h>
 2 v int main() {
 3
        int num;
 4
        int count = 0;
        scanf("%d", &num);
 5
 6
 7 🔻
        for (int i = 1; i <= num; ++i) {</pre>
 8
             count++;
             if (num % i == 0) {
9 🔻
10
                 count++;
                 //printf("%d ", i);
11
12
13
             count++;
14
        count++;
printf("%d", count);
15
16
17
        return 0;
18
   }
19
```

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

Passed all tests! 🗸

Correct

Marks for this submission: 1.00/1.00.

◄ Problem 2: Finding Complexity using Counter method

Jump to...

Problem 4: Finding Complexity using Counter Method ►

<u>Dashbo</u>... / <u>My cour</u>... / <u>CS23331-DAA-2023-A</u>... / <u>Finding Time Complexity of Algorit</u>... / <u>Problem 4: Finding Complexity using Counter Me</u>...

Started on	Tuesday, 20 August 2024, 2:39 PM
State	Finished
Completed on	Tuesday, 20 August 2024, 2:48 PM
Time taken	9 mins 47 secs
Marks	1.00/1.00
6	40.00 - 1 - 540.00 (4000)

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
```

Answer:

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

	Input	Expected	Got	
~	4	30	30	~
~	10	212	212	~

Passed all tests! 🗸

Correct

Marks for this submission: 1.00/1.00.

◄ Problem 3: Finding Complexity using Counter Method

Jump to...

Problem 5: Finding Complexity using counter method ►

Dashbo... / My cour... / CS23331-DAA-2023-A... / Finding Time Complexity of Algorit... / Problem 5: Finding Complexity using counter me...

Started on	Tuesday, 20 August 2024, 2:49 PM
State	Finished
Completed on	Tuesday, 20 August 2024, 2:54 PM
Time taken	5 mins 5 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:

```
#include<stdio.h>
 int main()
3 ▼ {
 4
       int n;
       scanf("%d",&n);
 5
 6
       int count=0;
      int rev = 0;
 7
 8
       count++;
9
       int remainder;
10
       count++;
11
       while (n != 0)
12 ▼
13
            count++;
            remainder = n % 10;
14
15
            count++;
            rev = rev * 10 + remainder;
16
17
            count++;
18
            n/= 10;
            count++;
19
20
        count++;
printf("%d",count);
21
22
23
        return 0;
24 }
```

	Input	Expected	Got	
~	12	11	11	~
~	1234	19	19	~

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Jump to...

1-Number of Zeros in a Given Array ►