Started on	Thursday, 22 August 2024, 8:47 AM
State	Finished
Completed on	Thursday, 22 August 2024, 8:51 AM
Time taken	4 mins 13 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	12

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
int main()
{
    int i= 1,n,s =1,c=0;
    c++;
    c++;
    scanf("%d",&n);
    while(s <= n)
    {
        c++;
        c++;
        c++;
        i++;
         s += i;
     }
     c++;
    printf("%d",c);

}
```

	Input	Expected	Got	
✔	9	12	12	✔
✔	4	9	9	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Started on	Thursday, 8 August 2024, 9:07 AM
State	Finished
Completed on	Thursday, 8 August 2024, 9:36 AM
Time taken	29 mins 4 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 func(int n)
{
    if(n==1)
    {
      printf("*");
    }
    else
    {
     for(int i=1; i<=n; i++)
     {
       for(int j=1; j<=n; j++)
       {
          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 %)

Ace editor not ready. Perhaps reload page?

Falling back to raw text area.

```
#include<stdio.h>
int main()
{
    int n,c=0;
    scanf("%d",&n);
    if(n==1)
    {
      c++;
      c++;
    }
    else
    {
     c++;
     for(int i=1; i<=n; i++)
     {
       c++;
       for(int j=1; j<=n; j++)
       {
```

	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 ►

Started on	Thursday, 22 August 2024, 8:07 AM
State	Finished
Completed on	Thursday, 22 August 2024, 8:14 AM
Time taken	6 mins 13 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.

```
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:

```c
#include<stdio.h>
int main()
 {
    int num,i,c=0;
    scanf("%d",&num);
    for (i = 1; i <= num;++i)
    {
        c++;
     if (num % i== 0)
        {
          c++;
        }
        c++;
     }
     c++;
     printf("%d",c);
     return 0;
 }
```

	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...

Started on	Thursday, 22 August 2024, 8:15 AM
State	Finished
Completed on	Thursday, 22 August 2024, 8:21 AM
Time taken	6 mins 17 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:

```
#include<stdio.h>
int main()
{
    int n,c= 0;
    scanf("%d",&n);
    for(int i=n/2; i<n; i++)
    {
        c++;
        for(int j=1; j<n; j = 2 * j)
        {
            c++;
            for(int k=1; k<n; k = k * 2)
            {
                c++;
                c++;
            }
            c++;
        }
        c++;
    }
    c++;
    c++;
    printf("%d",c);
}
```

	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 ►

Started on	Thursday, 22 August 2024, 8:21 AM
State	Finished
Completed on	Thursday, 22 August 2024, 8:24 AM
Time taken	3 mins 11 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()
{
   int rev = 0, remainder,c=0,n;
   scanf("%d",&n);
   while (n != 0)
    {
        c++;
        c++;
        c++;
        c++;
        remainder = n % 10;
        rev = rev * 10 + remainder;
        n/= 10;

    }
    c++;
    c++;
    c++;
    printf("%d",c);
}
```

	Input	Expected	Got	
✔	12	11	11	✔
✔	1234	19	19	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

◄ Problem 4: Finding Complexity using Counter Method

Jump to...

1-Number of Zeros in a Given Array ►