Started on	Thursday, 31 July 2025, 8:15 AM
State	Finished
Completed on	Thursday, 31 July 2025, 8:37 AM
Time taken	22 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 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 %)

Reset answer

Ace editor not ready. Perhaps reload page?

Falling back to raw text area.

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

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Started on	Thursday, 31 July 2025, 8:39 AM
State	Finished
Completed on	Thursday, 31 July 2025, 9:01 AM
Time taken	22 mins 9 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 %)

Reset answer

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

```
            count++;
            //printf("*");
            count++;
            break;
        }
        count++;
    }
    count++;
  }

}
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Started on	Thursday, 31 July 2025, 9:02 AM
State	Finished
Completed on	Thursday, 31 July 2025, 9:14 AM
Time taken	12 mins 40 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:

Reset answer

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

	Input	Expected	Got	
✔	12	31	31	✔

	Input	Expected	Got	
✔	25	54	54	✔
✔	4	12	12	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Started on	Thursday, 31 July 2025, 9:16 AM
State	Finished
Completed on	Thursday, 31 July 2025, 9:32 AM
Time taken	15 mins 59 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:

Reset answer

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

	Input	Expected	Got	
✔	4	30	30	✔
✔	10	212	212	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Started on	Thursday, 31 July 2025, 9:32 AM
State	Finished
Completed on	Thursday, 31 July 2025, 9:39 AM
Time taken	6 mins 7 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:

Reset answer

```c
#include<stdio.h>
void reverse(int n);
int count=0;
int main()
{
    int n;
    scanf("%d",&n);
    reverse(n);
    printf("%d",count);
}
void reverse(int n)
{
    int rev=0,remainder;
    count++;
    while(n!=0)
    {
        count++;
        remainder = n%10;
        count++;
        rev= rev*10 + remainder;
        count++;
        n/=10;
        count++;
    }
    count++;
    //print(rev);
    count++;
}
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.