



SANKARA GOMATHI R 2024-CSE ▾

S2**Started on** Monday, 29 September 2025, 7:38 PM**State** Finished**Completed on** Monday, 29 September 2025, 7:39 PM**Time taken** 27 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 %)

```
1  #include<stdio.h>
2  void pattern(int n){
3      int count=0;
4      if(n==1){
5          count++;
6      }
7      else{
8          count++;
9          for(int j=1;j<=n;j++){
10             count++;
11             count++;
12             count++;
13             count++;
14             count++;
15         }
16         count++;
17     }
18     printf("%d\n",count);
19 }
20 int main(){
21     int n;
22     scanf("%d",&n);
23     pattern(n);
24     return 0;
25 }
```

	Input	Expected	Got	
✓	2	12	12	✓

	Input	Expected	Got	
✓	1000	5002	5002	✓
✓	143	717	717	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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Started on	Monday, 29 September 2025, 7:39 PM
State	Finished
Completed on	Monday, 29 September 2025, 7:39 PM
Time taken	23 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:

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

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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S2

Started on	Monday, 29 September 2025, 7:40 PM
State	Finished
Completed on	Monday, 29 September 2025, 7:40 PM
Time taken	12 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  void func(int n){
3      int count=1;
4      for(int i=n/2;i<n;i++){
5          count+=1;
6          for(int j=1;j<n;j=2*j){
7              count+=1;
8              for(int k=1;k<n;k=k*2){
9                  count+=2;
10             }
11             count++;
12         }
13         count++;
14     }
15     count++;
16     printf("%d",count);
17 }
18 int main(){
19     int n;
20     scanf("%d",&n);
21     func(n);
22     return 0;
23 }
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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S2

Started on	Monday, 29 September 2025, 7:40 PM
State	Finished
Completed on	Monday, 29 September 2025, 7:40 PM
Time taken	14 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  void rev(int n){
3      int rev=0,rem,count=2;
4      while(n!=0){
5          count++;
6          rem=n%10;count++;
7          rev=rev*10+rem;count++;
8          n/=10;count++;
9      }
10     count++;
11     printf("%d",count);
12 }
13 int main(){
14     int n;
15     scanf("%d",&n);
16     rev(n);
17     return 0;
18 }
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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