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.

```
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);
void function(int n)
{
    int count=0;
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++;
printf("%d",count);
}
int main()
{
int n;
scanf("%d",&n);
function(n);
}
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.