Group 51

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Q1)

Sum of the series pseudo code in c

```
##include <stdio.h>
#
#int mul(int m){
#         if(n==0)return 0;
#         int num = fact(m-1);
#         int sum = 1;
#         for(int i=0;i<m;i++)sum *= m;
#
#         return num + sum;
#}
#         return num + sum;
#}
#         int n;
#         printf("Enter the number \n");
#         scanf("%d",&n);
#         int ans = fact(n);
#         printf("%d", ans);
#}</pre>
```

Sample Test Cases

```
Console

Enter the number 5
The sum of the series is:: 3413
```

Q2)

Collatz steps pseudo code in c

```
##include <stdio.h>
#int step = 0;
#void collatz(int n){
    if(n==1)return;
#
    if(n%2 == 0){
#
        n = n/2;
#
     }else{
#
        n = 3*n + 1;
#
#
    collatz(n);
#
#
    step++;
#}
#int main(){
     int n = 10;
     collatz(n);
#
     printf("%d",step);
#}
```

Sample Test Case



Console

Enter the number

The number of step required is:: 6