/\* Wap to print and find the sum of **Fibonacci series** using **recursion.** \*/

#include<iostream.h>

#include<conio.h>

int fibonacci(int n);

void main()

{

clrscr();

int n;

cout<<"\n\n Enter the number of terms upto which you want the sum of fibonnaci series : ";

cin>>n;

cout<<"\n\nThe fibonacci series generated is : \n\n";

cout<<"1 1 ";

int s=fibonacci(n);

cout<<"\n\nThe sum of fibonacci series for "<<n<<" terms = "<<s;

getch();

}

int first=1;

int second=1;

int third;

int i=2;

int sum=0;

int fibonacci(int n)

{ if(n==1)

sum=1;

else if(n==2)

sum=2;

// n = 1 2 3 4 5

else if(n>1 && i!=n) // num = 1 1 2 3 5

{

third=first+second;

cout<<third<<” “;

if(i==2)

sum+=first+second+third;

else

sum+=third;

first=second;

second=third;

++i;

fibonacci(n);

}

return sum;

}

**Output :**

Enter the number of terms upto which you want the sum of fibonnaci series : 5

The fibonacci series generated is :

1 1 2 3 5

The sum of fibonacci series for 5 terms = 12