

Write a program to find Fibonacci series up to n

Description

Fibonacci series is a special series where nth term is the sum of previous two terms in the series. The series starts with 0 and 1 as the first and second term of the series respectively.

Here you need to get the value for nth term from user and then print Fibonacci series containing n terms.

Input

5

Output

0,1,1,2,3

Input

8

Output

0,1,1,2,3,5,8,13

C Program

Method 1

```
#include <stdio.h>

int main()
{
    int num, a=-1, b=1, c;
    printf("Enter a number: ");
    scanf("%d", &num);
    printf("Fibonacci series: ");
    for(int i=0; i<num; i++)
    {
        c=a+b;
        printf("%d, ", c);
    }
}
```

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```
a=b;
b=c;
}
return 0;
}
```

Method 2

```
#include <stdio.h>
int fibonacci(int num)
```

```
{
    static int a = 0, b = 1, c;
    if(num > 0)
    {
        c = a + b;
        a = b;
        b = c;
        printf("%d, ", c);
        fibonacci(num-1);
    }
}
```

```
int main()
{
    int num;
    printf("Enter the number");
    scanf("%d", &num);
    printf("0, 1, ");
    fibonacci(num-2);
    return 0;
}
```

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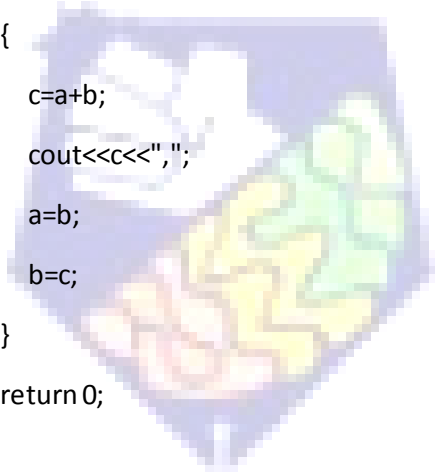
C++ Program

Method 1

```
#include <iostream>

using namespace std;

int main()
{
    int num, a=-1, b=1, c;
    cout<<"Enter a number: ";
    cin>>num;
    cout<<"Fibonacci series: ";
    for(int i=0; i<num; i++)
    {
        c=a+b;
        cout<<c<<" ";
        a=b;
        b=c;
    }
    return 0;
}
```



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Method 2

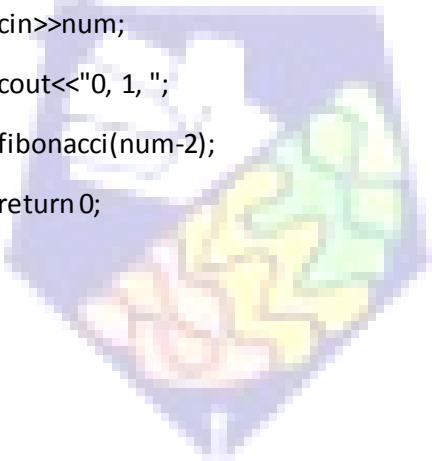
```
#include <iostream>

using namespace std;

int fibonacci(int num)
{
    static int a = 0, b = 1, c;
    if(num > 0)
    {
        c = a + b;
```

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```
    a = b;
    b = c;
    cout<<c<<" ";
    fibonacci(num-1);
}
return 0;
}
int main()
{
    int num;
    cout<<"Enter the number: ";
    cin>>num;
    cout<<"0, 1, ";
    fibonacci(num-2);
    return 0;
}
```



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Java Program

```
import java.util.Scanner;

public class Main
{
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter the number :");
        int num = sc.nextInt();
        if(num > 0)
        {
            int a = 0, b = 1, c;
            System.out.print("Fibonacci Series : "+a+", "+b+", ");
            while(b < num)
            {
                c = a + b;
                a = b;
                b = c;
                if(b <= num)
                    System.out.print(b+", ");
            }
        }
        else
            System.out.print("Invalid Input");
    }
}
```

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Python

```
num = int(input("Enter the Number:"))  
a, b = 0, 1  
print("Fibonacci Series:", a, ",", b, end=" , ")  
for i in range(2, num):  
    c = a + b  
    a = b  
    b = c  
    print(c, ",", end=" ")
```



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