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AI&DS Div:A Roll No:26

Tutorial No. 01

**Fibonacci series without recursion :**

#include <stdio.h>

int main()

{

    int n, a = 0, b = 1, c;

    printf("Enter the number of elements in fibonacci series\n");

    scanf("%d", &n);

    printf("0,1");

    for (int i = 0; i < n - 2; i++)

    {

        c = a + b;

        a = b;

        b = c;

        printf(",%d", c);

    }

    return 0;

}

**Fibonacci series with recursion :**

#include <stdio.h>

void fibonacciSeries(int n)

{

    static int a = 0, b = 1, c;

    if (n > 0)

    {

        c = a + b;

        a = b;

        b = c;

        printf(",%d", c);

        fibonacciSeries(n - 1);

    }

}

int main()

{

    int n;

    printf("Enter number of elements in fibonacci series\n");

    scanf("%d", &n);

    printf("0,1");

    fibonacciSeries(n - 2);

    return 0;

}