

/* 6. Write a C program to find Fibonacci series using Recursion */

```
#include<stdio.h>
```

```
int Fibonacci(int);
```

```
int main() {
```

```
    int n, i = 0, c;
```

```
    scanf("%d",&n);
```

```
    printf("Fibonacci series\n");
```

```
    for ( c = 1 ; c <= n ; c++ )
```

```
    {
```

```
        printf("%d\n", Fibonacci(i));
```

```
        i++;
```

```
    }
```

```
    return 0;
```

```
}
```

```
int Fibonacci(int n) {
```

```
    if ( n == 0 )
```

```
        return 0;
```

```
    else if ( n == 1 )
```

```
        return 1;
```

```
    else
```

```
        return ( Fibonacci(n-1) + Fibonacci(n-2) );
```

```
}
```

C:\Users\Sumanth\Desktop\Data Structure Lab SI-A\pgm-6 Fibonacci using recursion.cpp - [Executing] - Dev-C++ 5.11

File Edit Search View Project Execute Tools AStyle Window Help

(globale)

Project Classes Debug pgm-6 Fibonacci using recursion.cpp

```
1  /* 6. Write a C program to find Fibonacci series using Recursion */
2  #include<stdio.h>
3  int Fibonacci(int);
4  int main()
5  {
6      int n, i = 0, c;
7      scanf("%d",&n);
8      printf("Fibonacci series\n");
9      for ( c = 1 ; c <= n ; c++ )
10     {
11         printf("%d\n", Fibonacci(i));
12         i++;
13     }
14     return 0;
15 }
16 int Fibonacci(int n)
17 {
18     if ( n == 0 )
19         return 0;
20     else if ( n == 1 )
21         return 1;
22     else
23         return ( Fibonacci(n-1) + Fibonacci(n-2) );
24 }
```

5
Fibonacci series
0
1
1
2
3

Process exited after 20.41 seconds with return value 0
Press any key to continue . . .

Line: 11 Col: 32 Sel: 0 Lines: 24 Length: 431 Insert

Search

ENG IN 9:24 AM 5/5/2023