

Department of Computer Science and Engineering

**Course Code :** CSE- 110

**Course Title :** Introduction to Computer Systems.

**Report :** 11

**Experiment Name :** Program to Fibonacci series.

**Performance Date :** 15th May 2013

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**REMARKS**

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**DEPT :** **CSE**

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**SEM. :** **1st**

**Introduction:** The program is Fibonacci series. In this function we have taken recursion. The for statement is a loop, a generalization of the while. If you compare it to the earlier while, its operation should be clear. Within the parentheses, there are three parts, separated by semicolons. The first part, the initialization is done once, before the loop proper is entered. The second part is the test or condition that controls the loop.

**Objective:** Program to Fibonacci series.

**Source Code:**

#include<stdio.h>

int Fibonacci(int);

main()

{

int n,i=0,c;

printf("N:");

scanf("%d",&n);

printf("Fibonacci series\n");

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

{

printf ("\t%d\t%d",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));

}

**Sample input:**

N: 100

**Sample Output:**

FIBONACCI

0 1 1 2 3 5 8 13 21

34 55 89 144 233 377 610 987 1597 2584

4181 6765 10946 17711 28657 46368 75025 121393 196418 317811

514229 832040 1346269 2178309 3524578 5702887 9227465 14930352 24157817

39088169 63245986 102334155 165580141 26791429

6 433494437 701408733 1134903170 1836311903 -1323752

223 512559680 -811192543 -298632863 -1109825406 -1408458

269 1776683621 368225352 2144908973 -1781832971 36307600

2 -1418756969 -1055680967 1820529360 764848393 -1709589

543 -944741150 1640636603 695895453 -1958435240 -1262539

787 1073992269 -188547518 885444751 696897233 15823419

84 -2015728079 -433386095 1845853122 1412467027 -1036647

147 375819880 -660827267 -285007387 -945834654 -1230842

041 2118290601 887448560 -1289228135 -401779575 -1691007

710 -2092787285 511172301 -1581614984 -1070442683 16429096

29 572466946 -2079590721 -1507123775 708252800 -7988709

75 -90618175 -889489150 -980107325 -1869596475

Process returned 100 (0x64) execution times: 3.188 s

Press any key to continue.

**Discussion:** In this program we have taken the recursion function. There was no problem compiling this program