Department of Humanities and Applied Science

Academic Year: 2023-24   Name of Student: Vedant Nagesh Terse

Semester: II   Student ID:23104195

Class / Branch: F.E ALL   Date of Performance: 13/03/2024

Subject: C Programming   Date of Submission: 13/03/2024

Name of Instructor: Prof. Vandana Virbhadre

Experiment No.15

Aim: WAP to demonstrate working of recursive functions.

Problem statement:Write a program to implement Fibonacci Series using Recursion.

PROGRAM:-

```c
#include <stdio.h>

int fibonacci(int n) {

    if(n == 1 || n==2)
        return 1;
    else
        return (fibonacci(n-1) + fibonacci(n-2));
}

int main() {
    int fibonacci(int);
    int n;

    printf("Enter the number of terms:-");
    scanf("%d", &n);

    printf("Value of %d term=%d",n,fibonacci(n));
    return 0;
}
```

OUTPUT:-

```
apsit@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:~/Desktop/G475/EXp15$ gcc EXp15.c
apsit@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:~/Desktop/G475/EXp15$ ./a.out
Enter the number of terms:-5
Value of 5 term=5apsit@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:~/Desktop/G475/E
```