

Experiment 6-3

Q.3

include <stdio.h>

```
int FIBO (int num) {
    if (num == 0)
        return 0;
    else if (num == 1)
        return 1;
    else
        return FIBO (num-1) + FIBO (num-2);
}
```

```
int main () {
    int n;
```

Printf ("Fibonacci Sequence using Recursion /n");

Printf ("Enter the number of Terms ; ");
Scanf ("%d", &n);

Printf ("In Fibonacci Sequence up to %d terms: /n", n);

for (int i=0; i<n; i++)

printf ("%d", FIBO (i));

Remarks:

Teacher's Signature _____

Print f(" /n ");
return 0;

}

ramiz

Online Compiler

main.c

Run Output Clear

```
1 #include <stdio.h>
2
3 int FIBO(int num) {
4     if (num == 0) {
5         return 0;
6     } else if (num == 1) {
7         return 1;
8     } else {
9         return FIBO(num - 1) + FIBO(num - 2);
10    }
11 }
12
13 int main() {
14     int n;
15
16     printf("--- Fibonacci Sequence using Recursion ---\n");
17     printf("Enter the number of terms: ");
18     scanf("%d", &n);
19
20     printf("\nFibonacci Sequence up to %d terms:\n", n);
21     for (int i = 0; i < n; i++) {
22         printf("%d ", FIBO(i));
23     }
24     printf("\n");
25
26     return 0;
}
```

--- Fibonacci Sequence using Recursion ---
Enter the number of terms: 12
Fibonacci Sequence up to 12 terms:
0 1 1 2 3 5 8 13 21 34 55 89
== Code Execution Successful ==

