

## 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 ("\n 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



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;
27 }
```

--- 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 ===

