

## EXPERIMENT 3:

### FIBONACCI

#### CODE:

```
#include <stdio.h>

int main() {

    int n, a = 0, b = 1, next, sum = 0;

    printf("Enter number of terms: ");

    scanf("%d", &n);

    printf("Fibonacci series: ");

    for (int i = 1; i <= n; i++) {

        printf("%d ", a);

        sum += a;

        next = a + b;

        a = b;

        b = next;

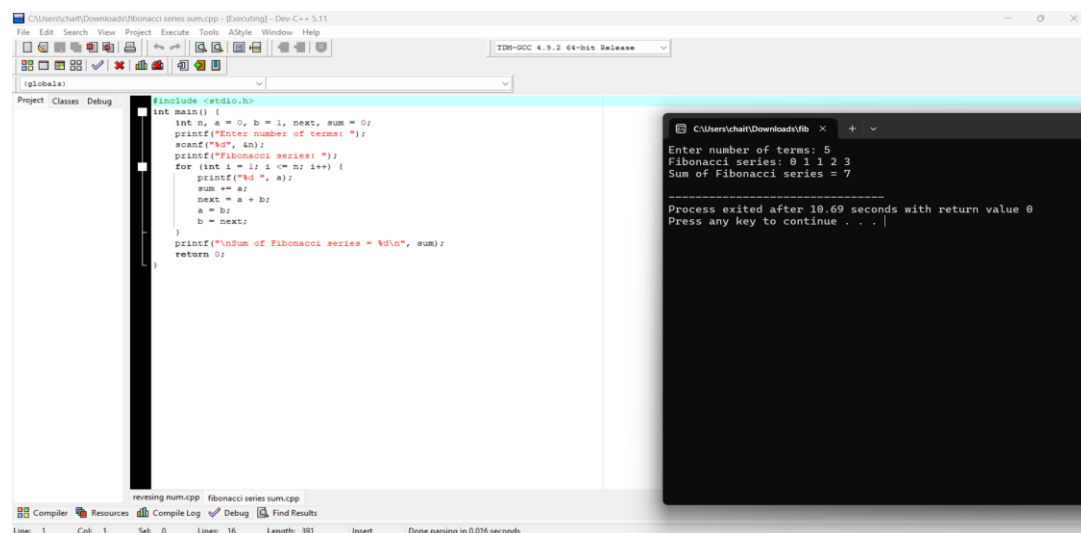
    }

    printf("\nSum of Fibonacci series = %d\n", sum);

    return 0;

}
```

#### OUTPUT:



The screenshot shows the Dev-C++ IDE with the following code in the editor:

```
#include <stdio.h>

int main() {
    int n, a = 0, b = 1, next, sum = 0;
    printf("Enter number of terms: ");
    scanf("%d", &n);
    printf("Fibonacci series: ");
    for (int i = 1; i <= n; i++) {
        printf("%d ", a);
        sum += a;
        next = a + b;
        a = b;
        b = next;
    }
    printf("\nSum of Fibonacci series = %d\n", sum);
    return 0;
}
```

The output window displays the following text:

```
Enter number of terms: 5
Fibonacci series: 0 1 1 2 3
Sum of Fibonacci series = 7

Process exited after 10.69 seconds with return value 0
Press any key to continue . . .
```

