

## 1. Calculate the nth term

```
#include <stdio.h>
#include <string.h>
#include <math.h>
#include <stdlib.h>

int find_nth_term(int n, int a, int b, int c)
{
    int term, t1 = a, t2 = b, t3 = c;
    if (n == 1)
        term = t1;
    else if (n == 2)
        term = t2;
    else if (n == 3)
        term = t3;
    else {
        for (int i = 4; i <= n; i++) {
            term = t1 + t2 + t3;
            t1 = t2;
            t2 = t3;
            t3 = term;
        }
    }
    return term;
}

int main() {
    int n, a, b, c;

    scanf("%d %d %d %d", &n, &a, &b, &c);
    int ans = find_nth_term(n, a, b, c);

    printf("%d", ans);
    return 0;
}
```

## 2. Student Marks Sum

```
#include <stdio.h>
#include <string.h>
#include <math.h>
#include <stdlib.h>

int marks_summation(int* marks, int number_of_students, char gender)
{
    int sum = 0;
    for(int i = (gender == 'b' ? 0 : gender == 'g' ? 1 : -1); i < number_of_students; i+=2)
    {
        sum += marks[i];
    }
    return sum;
}

int main() {
    int number_of_students;
    char gender;
    int sum;

    scanf("%d", &number_of_students);
    int *marks = (int *) malloc(number_of_students * sizeof (int));

    for (int student = 0; student < number_of_students; student++) {
        scanf("%d", (marks + student));
    }

    scanf(" %c", &gender);
    sum = marks_summation(marks, number_of_students, gender);
    printf("%d", sum);
    free(marks);

    return 0;
}
```

### 3. Nth Tribonacci number

```
#include <stdio.h>
// Function to calculate the Nth Tribonacci number

int tribonacci(int n) {
    if (n == 0) return 0;
    if (n == 1 || n == 2) return 1;
    int a = 0, b = 1, c = 1, next;
    for (int i = 3; i <= n; i++) {
        next = a + b + c; // Calculate the next term
        a = b; // Update a to the next term
        b = c; // Update b to the next term
        c = next; // Update c to the next term
    }

    return c;
}

int main() {
    int n;
    // Input the value of N
    printf("Enter the value of N: ");
    scanf("%d", &n);
    // Calculate and display the Nth Tribonacci number
    printf("The %dth Tribonacci number is: %d\n", n, tribonacci(n));
    return 0;
}
```