There is a series, S , where the next term is the sum of pervious three terms. Given the first three terms of the series, a ,b , and c  respectively, you have to output the nth term of the series using recursion.

Recursive method for calculating nth term is given below.

**Input Format**

* The first line contains a single integer, n.
* The next line contains 3 space-separated integers ,a ,b , and c.

**Output Format**

* Print the nth term of the series,S(n) .

**Sample Input 0**

* 5
* 1 2 3

**Sample Output 0**

* 11

Formula is S(n) = S(n-1)+ S(n-2)+S(n-3)

Answer:

**#include** **<**stdio.h**>**

**#include** **<**string.h**>**

**#include** **<**math.h**>**

**#include** **<**stdlib.h**>**

*//Complete the following function.*

**int** nth\_term(**int** n, **int** a, **int** b, **int** c) {

*//Write your code here.*

**int** i;

**int** arr[100];

  arr[1] = a;

  arr[2] = b;

  arr[3] = c;

**for**(i=4; i<=n; i++)

  {

      arr[i] = arr[i-1]+arr[i-2]+arr[i-3];

  }

**return** arr[n];

}

**int** main() {

**int** n, a, b, c;

**int** ans;

    scanf("%d", &n);

    scanf("%d %d %d", &a, &b, &c);

    ans = nth\_term(n, a, b, c);

    printf("%d", ans);

**return** 0;

}