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...ssignments\131_Assignment_5\Question_4\Question_4.cpp 1
1 // 2
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2 //Name Sai Chaitanya Kilambi
3 //Course CPSC 131 Data Structures, Fall, 2022
4 //Assignment No.5 question:4
5 //Due date 09/28/2022
6 // Purpose:
7 // This program call a recursive function that computes the given term of 2
the Fibonacci numbers
8 //----- 2
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9 // list of libraries
10 //
11 //importing the required libraries
12 #include <iostream>
13
14 //creating the recursive function
15 int fib(int num)
16 {
17     if (num == 0) {
18         return 0; //fact 1
19     }
20
21     else {
22         if (num == 1){
23             return 1; //fact 2
24         }
25         else {
26             return fib(num - 1) + fib(num - 2); //recursion
27         }
28     }
29 }
30
31 }
32 //main function
33 int main() {
34
35     int n1=10,n2=45;
36
37     // calling function and printing the output
38     std::cout<<"The "<<n1<<"th term of Fibonacci numbers is " << fib(n1) 2
<<std::endl;
39     std::cout << "The " << n2 << "th term of Fibonacci numbers is " << fib 2
(n2);
40
41     return 0;
42
43 }

```