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1 #include<iostream>
2 using namespace std;
3 //function using recursion
4 int rec_fib(int n) {
5     if((n==1)||(n==0)) {
6         return(n);
7     }else {
8         return(rec_fib(n-1)+rec_fib(n-2));
9     }
10 }
11 // function using iteration
12 void iter_fib(int n) {
13     int x = 0, y = 1, z = 0;
14     for (int i = 0; i < n; i++) {
15         cout << x << " ";
16         z = x + y;
17         x = y;
18         y = z;
19     }
20 }
21 int main() {
22     int n, i=0;
23     cout << "Enter the number of terms of series : ";
24     cin >> n;
25     cout << "\nFibonnaci Series : ";
26     iter_fib(n); //iterative function call
27     cout << "\nFibonnaci Series : ";
28     while(i < n) {
29         cout << " " << rec_fib(i); //recursive function call
30         i++;
31     }
32     return 0;
33 }
```

```
ubuntu@linux:~$ g++ DAA_Program1.cpp
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ubuntu@linux:~$ ./a.out
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```
Enter the number of terms of series : 10
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```
Fibonnaci Series : 0 1 1 2 3 5 8 13 21 34
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```
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```

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ubuntu@linux:~$
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