

Lab Manual :6

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Question:1

Generate the Fibonacci sequence

The screenshot shows a C++ IDE with a file named 'Untitled1.cpp'. The code is as follows:

```
1 #include <iostream>
2 using namespace std;
3
4 int main() {
5     int n;
6
7
8     cout << "Enter number of terms for Fibonacci sequence: ";
9     cin >> n;
10
11     int firstTerm = 0, secondTerm = 1, nextTerm;
12
13     cout << "Fibonacci Sequence: " << firstTerm << " " << secondTerm << " ";
14
15     for (int i = 2; i < n; ++i) {
16         nextTerm = firstTerm + secondTerm;
17         firstTerm = secondTerm;
18         secondTerm = nextTerm;
19         cout << " " << nextTerm << " ";
20     }
21     cout << endl;
22 }
```

The output window shows the following text:

```
Enter number of terms for Fibonacci sequence: 4
Fibonacci Sequence: 0 1 1 2
Process exited after 1.428 seconds with return value 0
Press any key to continue . . .
```

Question:2 Create Floyd's triangle

The screenshot shows a C++ IDE with a file named 'Untitled1.cpp'. The code is as follows:

```
1 #include <iostream>
2 using namespace std;
3
4 int main() {
5     int n;
6
7     cout << "Enter number of rows for Floyd Triangle: ";
8     cin >> n;
9
10    int number = 1;
11
12    for (int i = 1; i <= n; i++) {
13        for (int j = 1; j <= i; j++) {
14            cout << number << " ";
15            ++number;
16        }
17        cout << endl;
18    }
19 }
```

The output window shows the following text:

```
Enter number of rows for Floyd Triangle: 6
1
2 3
4 5 6
7 8 9 10
11 12 13 14 15
16 17 18 19 20 21
Process exited after 2.785 seconds with return value 0
Press any key to continue . . .
```

