Fibonacci Numbers

The Fibonacci numbers are the numbers in the following integer sequence.
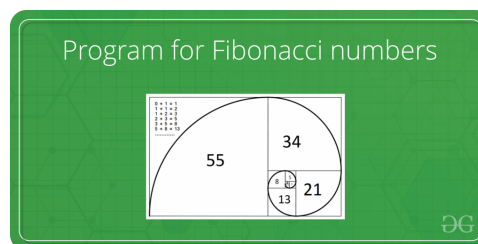
0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, ……..

In mathematical terms, the sequence Fn of Fibonacci numbers is defined by the recurrence relation

```
Fn = Fn-1 + Fn-2
```

with seed values

```
F0 = 0 and F1 = 1.
```


Given a number n, print n-th Fibonacci Number.

Examples:

```
Input  : n = 2
Output : 1

Input  : n = 9
Output : 34
```

```
#include<iostream>
using namespace std;

int main()
{
    int n;
```

```cpp
    cin >> n;
    int a = 1, b = 1, c = 0;
    cout << "1 1 ";
    for(int i = 2; i < n; i++)
    {
        c = a + b;
        cout << c << ' ';
        a = b;
        b = c;
    }
    return 0;
}
```

INPUT :

```
9
```

OUTPUT :

```
1 1 2 3 5 8 13 21 34
```