

## Fibonacci numbers in Java

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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  $F_n$  of Fibonacci numbers is defined by the recurrence relation

$$F_n = F_{n-1} + F_{n-2}$$

with seed values

$$F_0 = 0 \text{ and } F_1 = 1.$$



Given a number  $n$ , print first  $n$  Fibonacci Numbers.

Examples:

Input :  $n = 2$

Output : 0 1

Input :  $n = 9$

Output : 0 1 1 2 3 5 8 13 21

```
// Java Program to print first n fibonacci numbers
import java.util.Scanner;

class GfG {
    public static void main(String[] args) {
        int n = 9;
```

```

    int a = 0, b = 1;
    if (n == 1) {
        System.out.print(a);
    }
    else if (n == 2) {
        System.out.print(a + " " + b);
    }
    else {
        System.out.print(a + " " + b + " ");
        for (int i = 3; i <= n; i++) {
            int c = a + b;
            System.out.print(c + " ");
            a = b;
            b = c;
        }
    }
}

```

## Output

0 1 1 2 3 5 8 13 21