面试题10：斐波那契数列

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题目描述

大家都知道斐波那契数列，现在要求输入一个整数n，请你输出斐波那契数列的第n项（从0开始，第0项为0）。n<=39

C++

```cpp
class Solution {
public:
    int Fibonacci(int n) {
        int result[2] = {0,1};
        if(n < 2)
            return result[n];

        int fibNMinusOne = 1;
        int fibNMinusTwo = 0;
        int fibN = 0;
        for(unsigned int i = 2;i <= n;++i){
            fibN = fibNMinusOne + fibNMinusTwo;

            fibNMinusTwo = fibNMinusOne;
            fibNMinusOne = fibN;
```

```
16            }
17
18            return fibN;
19        }
20  };
```

Java

```java
public class Solution {
    public int Fibonacci(int n) {
        if(n == 0 || n ==1)
            return n;
        int fibNMinusOne = 1;
        int fibNMinusTwo = 0;
        int fibN = 0;
        for( int i = 2;i <= n; i++){
            fibN =fibNMinusOne + fibNMinusTwo;
            fibNMinusTwo =fibNMinusOne;
            fibNMinusOne = fibN;
        }
        return fibN;
    }
}
```