

```
public class Fibonacci {

    public static int fib(int n){
        if(n == 0 || n == 1){
            return n;
        }
        return fib(n - 1) + fib(n - 2);
    }

    public static int fibM(int n){

        int storage[] = new int[n + 1];
        for(int i = 0; i <= n; i++){
            storage[i] = -1;
        }
        return fibM(n, storage);

    }

    public static int fibM(int n, int storage[]){
        if(n == 0 || n == 1){
            storage[n] = n;
            return storage[n];
        }
        if(storage[n] != -1){
            return storage[n];
        }

        storage[n] = fibM(n - 1, storage) + fibM(n - 2, storage);
        return storage[n];
    }

    public static int fibDP(int n){

        int storage[] = new int[n + 1];
        storage[0] = 0;
        storage[1] = 1;

        for(int i = 2; i <= n; i++){
            storage[i] = storage[i - 1] + storage[i - 2];
        }
        return storage[n];
    }

    public static void main(String[] args) {
        int n = 44;
        System.out.println(fibDP(n));
        System.out.println(fibM(n));
        System.out.println(fib(n));
    }

}
```