import java.util.HashMap;

public class Fibonacci {

private HashMap<Integer, Integer>memo=new HashMap<>();

public int fibmemo(int n) {

if(memo.containsKey(n)) {

return memo.get(n);

}

if(n<=1) {

return n;

}

int result=fibmemo(n-1)+fibmemo(n-2);

memo.put(n, result);

return result;

}

public static void main(String[] args) {

Fibonacci fibonacci=new Fibonacci();

int n=10;

System.out.println("Fibonacci of"+ n + " is:" + fibonacci.fibmemo(n));

}

}