## Recursion

**Example: Summing from** n **to** k Let's write a recursive function that does simple math. Given two integers, n and k, where  $n \le k$ , find the sum of integers from n to k, inclusive (e.g., if n = 2, and k = 4, our program will add 2 + 3 + 4)

```
int mySum (int n, int k) {
}
```

## Problem 1: Computing the $n^{th}$ Fibonacci number

Translate the following into a recursive MIPS function.

```
int fib (int n) {
    if (n <= 1)
        return n;
    else
        return fib (n - 1) + fib (n - 2);
}</pre>
```