

# Recursive Function

## Basic Rules for a recursive function

1) Base Case: must always have a base case in order to make a recursive call  
2) Must stop at some point

## Examples

Fibonacci \$\$  $\text{fib}_n = \text{fib}_{n-1} + \text{fib}_{n-2}$  \$\$

```
int sum(A,n)    // finds the sum of n elements

// Recursive Example
int sum(A,n){
    if(n==0) return 0;
    return sum(A, n-1) + A[n-1];
}
```

#cpp

#code

#recursion

#functions