

Problem: Compute the n^{th} Fibonacci number.

What is the Fibonacci sequence?

- A sequence of numbers such that the next number is found by adding the two before it.

0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, ...

1 2 3 4 5 6 7 8 9 10 11 12

given $n=9$, the 9^{th} fibonacci number = 21

following the definition, $f(9) = f(9-1) + f(9-2)$
 $f(8) + f(7)$
 $13 + 8 = 21$

Implementation

```
function findFibonacci(n) {
```

```
  if (n <= 0) {  
    return 0;
```

```
  } else if (n === 1) {  
    return 1;
```

```
  }
```

```
  return (n-1) + (n-2);
```

```
}
```

combine into

```
if (n <= 1) {  
  return n;
```

```
}
```