

# Calculating Fibonacci numbers recursively

Recursive algorithm to compute  $F(n)$ :

- ▶ If ( $n = 1$  or  $n = 2$ ) then Return (1)
- ▶ Else
  - ▶ Recursively compute  $F(n - 1)$  and store in  $X$
  - ▶ Recursively compute  $F(n - 2)$  and store in  $Y$
  - ▶ Return  $X + Y$

Class exercise: Try computing  $F(10)$  using this approach in 3 minutes.