

FIB( $n$ ):

```
1  if  $n < 0$ :  
2      return null  
3  if  $n = 0$  or  $n = 1$ :           // you can also  
4      return  $n$                  // add comments!  
5  return FIB( $n - 1$ ) + FIB( $n - 2$ )
```

```
if  $n < 0$ :  
    return null  
if  $n = 0$  or  $n = 1$ :  
    return  $n$   
  
let  $x \leftarrow 0$   
let  $y \leftarrow 1$   
for  $i \leftarrow 2$  to  $n - 1$ : // so dynamic!  
    let  $z \leftarrow x + y$   
     $x \leftarrow y$   
     $y \leftarrow z$   
  
return  $x + y$ 
```

*FIB* ( $n$ ):

```
1  if  $n < 0$ :  
2  |   return null  
3  if  $n = 0$  or  $n = 1$ :  
4  |   return  $n$   
5  
6  let  $x \leftarrow 0$   
7  ▷ for instance  
8  
9  for  
10 for                                ▷ used #no-keyword[for]  
11 superloop                          ▷ used #keyword[superloop]  
12 let  $y \leftarrow 1$   
13 for  $i \leftarrow 2$  to  $n - 1$ :          ▷ so dynamic!  
14 |   let  $z \leftarrow x + y$  if  $x \neq 0$   
15 |    $x \leftarrow y$   
16 |    $y \leftarrow z$   
17  
18  
19 return  $x + y$ 
```

```
1 def fib(n):
2     if n < 0:
3         return None
4     if n == 0 or n == 1:      # this comment is
5         return n             # normal raw text
6     return fib(n-1) + fib(n-2)
```

```
1 def fib(n):
2     | if n < 0:
3     |     return None
4     | if n == 0 or n == 1:      # this comment is
5     |     return n             # normal raw text
6     | return fib(n-1) + fib(n-2)
```