Recursive functions

```
f(0) = 1
f(1) = 2
f(n) = 2f(n-1) +3
f(n-2)
f(5) = ?
```

Recursive functions

```
f(1) = 2
f(n) = 2f(n-1) + 3
f(n-2)
f(5) = ?
  f(n) = 2f(n-1) + 3 f(n-2)
  f(3) = 2f(2) + 3f(1)
      = 2*7 + 3*2
      = 20
```

f(0) = 1

$$f(n) = 2f(n-1) + 3 f(n-2)$$

$$f(4) = 2f(3) + 3f(2)$$

$$= 2*20 + 3*7$$

$$= 61$$

Recursive functions

```
f(n) = 2f(n-1) + 3 f(n-2)

f(5) = 2f(4) + 3f(3)

= 2*61 + 3*20

= 182
```