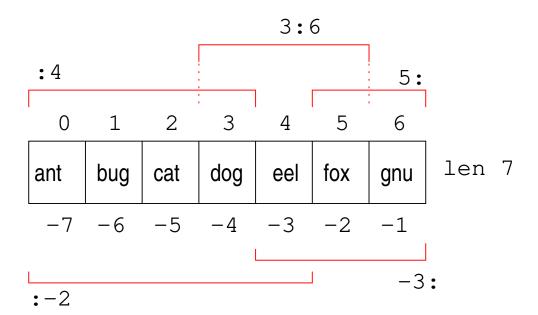
## Chapter 2 outline:

- Mathematical sequences and Python lists (Monday)
- Recurrence relations and recursive functions (today)
- Functions on lists (Friday)
- ► More about functions on lists; sorting (next week Monday)
- Review for test (next week Wednesday)
- ► Test on Chapters 1 & 2 (next week Fri, Feb 7)

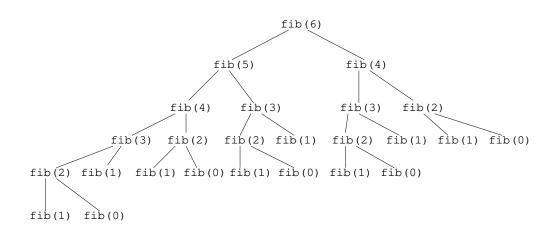
## Today:

- Recurrence relations
- Python pieces
- Recursive functions
- Functions to build lists



The ideas introduced in Sections 2.2 (today) and 2.3 (next time and Monday) include

- Recursion, or defining a object or process self-referentially.
- ▶ Decision-making using conditional expressions and statements.
- Storing values in local (temporary) variables so that the values can be reused instead of recomputed.
- Algorithms for building sets and lists recursively.
- Algorithms for processing lists recursively.



## For next time:

Do Exercises 2.2.(2, 3, 8, 9, 12).

Note that Exercise 2.2.12 (powerset) requires your solution to an exercise from a previous assignment: You'll need to grab your code from Exercise 1.8.13 (add to each).

Read 2.3

Take quiz (short)