

## Object-Oriented Programming unit:

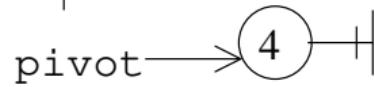
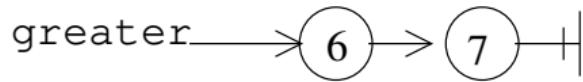
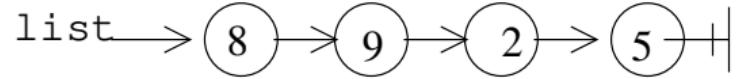
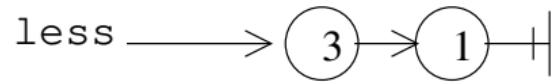
- ▶ Review of object-oriented concepts (week-before Friday and last week Monday)
- ▶ Review of linked lists (last week Wednesday)
- ▶ More on linked structures (Last week Friday)
- ▶ Documentation; Java GUI components (next week Monday)
- ▶ Abstract data types and Java Collections (Wednesday and Friday)
- ▶ Next week: Review (Wednesday) and Test 1 (Friday)

## Today:

- ▶ Documentation and Javadoc
- ▶ Swing and AWT (GUI) components
- ▶ Time permitting: Quick sort on lists

## Documentation principles:

- Classes.** Document classes with a block explaining what the class is or does and what instances of the class represent.
- Variables.** For (almost) every variable, state what the variable *means* and how it relates to the rest of the system.
  - Instance and static variables.** Use a block comment.
  - Formal parameters.** Use a `@param` tag.
  - Local variables.** Use a line comment.
- Methods.** In a block comment, give a one-sentence description of what the method does (what the rest of the system sees). Then following up with a description of how the method does it (the algorithm). Document its parameters and return value with `@param` and `@returns` tags. Indicate how the state of the object changes with a postcondition.
- In-code documentation.** Show how the code is organized and explain parts that may be hard to follow. But if the code needs documentation to be understood, consider extracting a helper method.



## Coming up:

- ▶ *Read Savitch Chapter 17 for Swing and AWT*
- ▶ **Due Wed, Feb 18.** Do Project 2, “First Calculator.”
- ▶ *Read prelab reading and take quiz (Coming soon...)*