Configure IntelliJ IDEA

- From main screen

- Select Configure -> Project Defaults -> Project Structure

  - Pick JDK 11 for Project SDK

  - Pick 11 for Project language level

Lambda

Configure IntelliJ IDEA

- From main screen

- Select Configure -> Preferences ->

  - Editor -> General -> Auto Import

    - Checked Add unambiguous imports on the fly

    - Checked Optimize imports on the fly

  - Editor -> General -> Code Folding

    - ONLY show code folding outline checked

Configure IntelliJ IDEA

- Editor -> Code Style -> Java

  - Braces placement

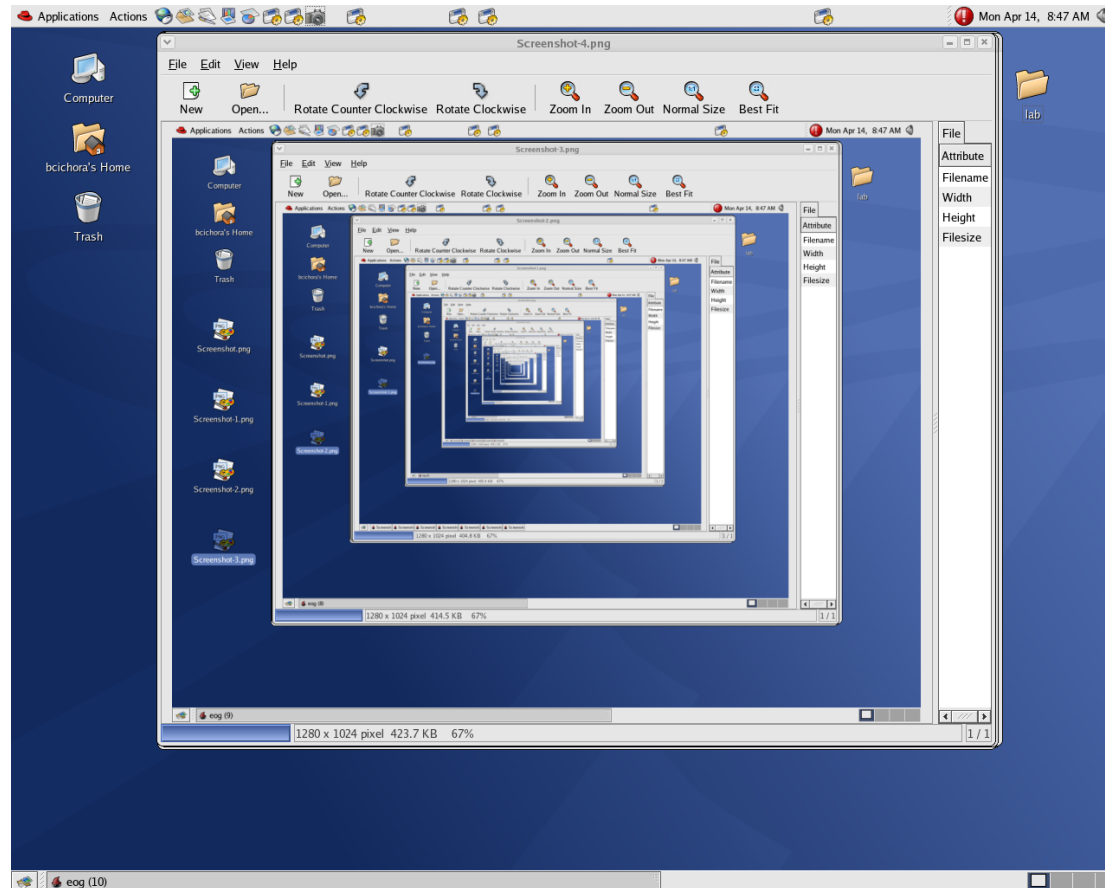   - All should say Next Line

Lambda

Random in Java

- import java.util.random

- Random rand = new Random();

- rand.nextInt(); // -max int through max int

- rand.nextInt(5) // 0 through 4

Looping in Java

- For loop - break and continue

- While loop

- Do While loop - rare, body run at least once. Popular for data entry

- Recursion - a thing is defined in terms of itself

Lambda

Looping in Java

- Recursion - a thing is defined in terms of itself

Looping in Java

- Recursion - a thing is defined in terms of itself
  - Factorial - the product of an integer and the all the integers below it
    - 7! = 7 * 6 * 5 * 4 * 3 * 2 * 1
    - 4! = 4 * 3!

      3! = 3 * 2!

      2! = 2 * 1!

      1! = 1 // recursion must have ending point!

Collections in Java

- Arrays
  - Objects
  - fixed length
  - fixed data type

Lambda

Collections in Java

- ArraysList

  - Collection

  - Varied length

  - fixed data type

  - Order maintained

Collections in Java

- HashMap

  - Collection

  - Varied length

  - fixed data type

  - Order NOT maintained

  - Duplicate Keys NOT allowed / Duplicate Values allowed

  - Key, Value based

Collections in Java

- HashSet

  - Collection

  - Varied length

  - fixed data type

  - Order NOT maintained

  - Duplicate Values NOT allowed

  - Value based