Civilization advances by extending the number of operations we can perform without thinking about them.

-Alfred North Whitehead
Defining a Method

visibility type nameOfMethod (parameters) {
    statements
}

- **visibility**: usually private or public
- **type**: type returned by method (e.g., int, boolean, etc.)
  - Can be **void** to indicate that nothing is returned
- **parameters**: information passed into method
An Example of a Method

private double feetToInches(double feet) {
    return 12 * feet;
}
Multiple *return* statements

```java
private int max(int val1, int val2) {
    if (val1 > val2) {
        return (val1);
    } else {
        return (val2);
    }
}
```
Predicate Methods

private boolean isOdd(int x) {
    return ((x % 2) == 1);
}

Methods That Don’t Return Anything

private void printIntro() {
    println("Welcome to CS106A");
    println("It's the best part of my day.");
}
Returning objects

// (x, y) denotes center point of filled circle
private GOval filledCircle(double x,
                            double y,
                            double r) {
    GOval circle = new GOval(x-r, y-r, 2*r, 2*r);
    circle.setFilled(true);
    return circle;
}

private GLabel coloredLabel(String text,
                            Color color) {
    GLabel label = new GLabel(text);
    label.setColor(color);
    return label;
}