

# Today

- Final binary scanner questions
- while vs do-while
- Methods

# Brief Questions

# Quiz

- [to loops slide set]

# Methods

Key programming tool:

- Cut code into manageable chunks
  - Easier to read, test, debug and maintain
- Enable re-use of code
  - Only have to implement once & then can use it many times
- First step in abstraction:
  - We can use a method without knowing the details of how it is implemented!

# Methods

- Scope:
  - Have their own area for variables (their own area on the “call stack”)
  - Cannot “see” variables outside the method
  - For now: changes to variables inside a method do not affect the outside world
    - This will change once we get to objects
- Return value
  - The method can “hand” a value back to the calling method

# Method Example I

Problem: design a method that will check whether a forward motion of the robot is appropriate given the position of the infant's left hand

- What are the parameters (the inputs?)
- What is returned?

# Project 1

- Due: Sept 22nd @2pm
- Code reviews must be completed no later than Sept 25th @11am



# Method Example II

Problem: design a method that takes as input a score between 0 and 100 and returns a letter grade

- What are the parameters (the inputs?)
- What is returned?

# Method Example III

Problem: design a method that indicate whether a number is odd or even

- What are the parameters (the inputs?)
- What is returned?

# Wrap Up

Coming up:

- HW 3: due Wednesday
- Exam 1: Sept 15
- Project 1: Due Monday, Sept 22nd

Next time:

- Exam preparation

Next week: I will not have office hours