Today's Topics

- Braitenberg Vehicles
- ROBOLAB
  - Control structures
  - Data & containers
- Line following

Braitenberg Vehicles

- How do people ascribe behavior?
  - The inferred properties may be more complicated than known structure
  - Emergent behavior of interacting pieces
- Fear and Aggression
  - Excitatory connections
  - 2 sensors
  - 2 motors

Questions

- For each of the following, describe what the sequence of ROBOLAB commands should do:

Control structures

- Forks

- Loops

- Tasks
Sharing resources

- **Sensors**
- **Motors**

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Line following 1

- **Setup**
  - Start on right side of line
  - Use Loops and Wait Fors
- **Program**
  - Repeat
    - Pivot left until dark
    - Pivot right until light
- **Problems?**

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Line following 2

- **Setup**
  - Start on right side of line
  - Use Loops and forks
- **Program**
  - Repeat
    - If light, pivot left
    - If dark, pivot right
- **Problems?**

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Line following 3

- **Setup**
  - 2 light sensors
  - Start straddling line
  - Use Loops and Forks
- **Program?**
Sharing control

Both tasks are trying to control Motor A.

Stepping task #2 will not turn Motor B.

Containers are global variables. The same container can be used in any task.