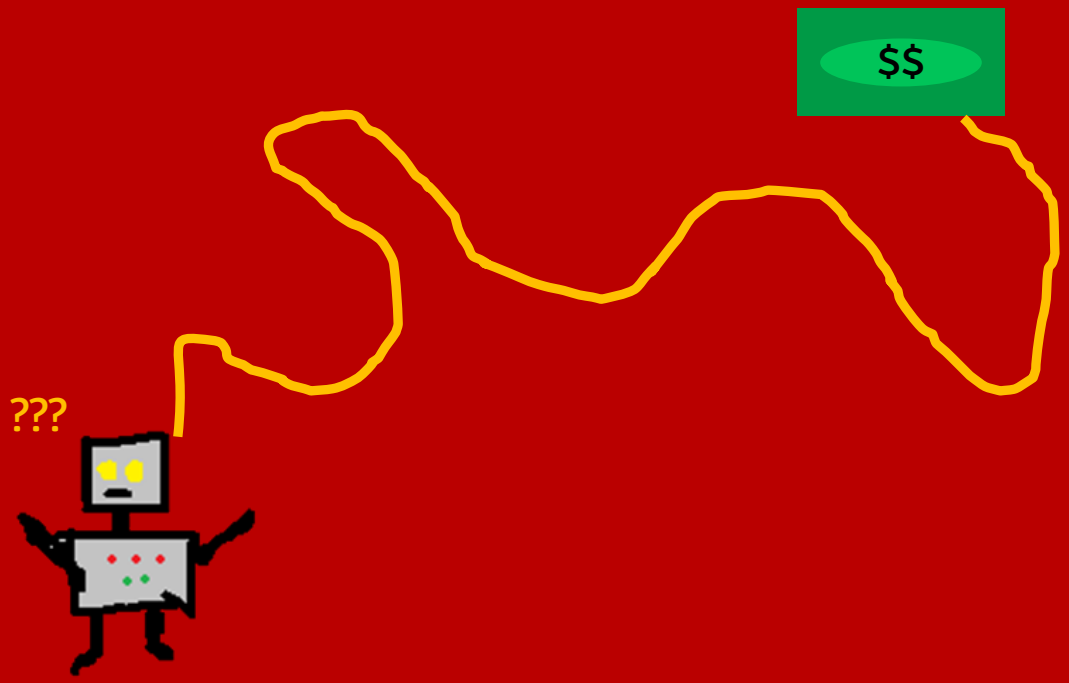

REINFORCEMENT LEARNING

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FINAL PROJECT – OPTIONS

1. Empirical evaluation of an RL method
   - Get a classic method working in a nontrivial environment (MuJoCo, Atari…)
   - Implement your own method and make it work in a simple environment (MountainCar, CartPole…)
   - Tell me what you learned! What worked, what did not? Produce some plots (e.g., learning curves, value functions) and try to tell a story.

FINAL PROJECT – OPTIONS

2. Literature review
   - Pick an area of RL that you are interested in and read some papers / surveys / book chapters.
   - Tell me about the basics of the area you picked.
   - Many possible topics:
     - Partially observable MDPs
     - Multi-objective and constrained MDPs
     - Structured MDPs (e.g., factored MDPs, linear MDPs)
     - Multi-agent RL
     - Inverse RL
     - Off-Policy RL
     - Bayesian RL
     - Model-based RL
     - RL & Neuroscience

ORGANIZATION

- Can work in groups of 3
- Give a 15-minute presentation on June 30th (in person)
- Prepare a report and send it by July 2nd
  - In case of empirical projects, you should be able to explain what your code does and answer questions about the algorithmic ideas in there. No need to memorize all algorithm details, just do your best to understand & explain what's going on.
  - In case of literature review, you should be able to explain the main ideas of the area you picked at least on a high level.