# CS343 Artificial Intelligence

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## Good Morning, Colleagues



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Are there any questions?

# Logistics

• RL assignment due

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- Tracking assignment assigned.

#### **Questions**

Bayes' nets exam question (question 4)

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- When is sampling / exact inference used? Before the agent starts acting in the environment and the whole net is solved or on the fly?
- Go over variable elimination
- Sampling example
- What's the point of rejection sampling?
- When would you use Gibbs sampling rather than likelihood weighting?
- Why Gibbs sampling only condition on Markov Blanket?

### **Pending Questions**

- Var elimination example
- What gained w/ factor matrices vs. enumeration?
- Enumeration ever preferable?
- Exact inference ever feasible?
- Rejection sampling ever feasible?
- Consistency of likelihood weighting proof?
- Gibbs example?
- When perfer Gibbs vs. likelihood weighting?

• hard to sample (vs. easy) distribution?