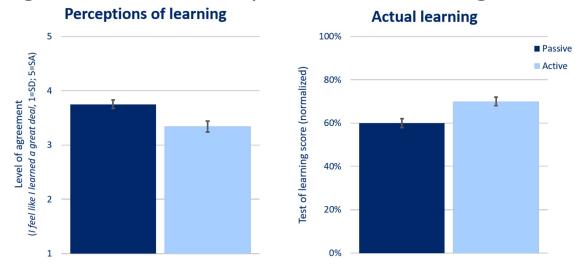


#### What is Discussion

- Discuss anything related to course materials with your classmates (and me).
- Form up groups (up to 3 people) to complete tasks.
- Feel free to ask any questions!

# Why Discussion

 Research shows that the discussion, as a format of active learning, can lead to deeper understanding.



<sup>[1]</sup> L. Deslauriers, L. S. McCarty, K. Miller, et al., "Measuring actual learning versus feeling of learning in response to being actively engaged in the classroom", *Proceedings of the National Academy of Sciences*, 2019, ISSN: 0027-8424. DOI: 10.1073/pnas. 1821936116. [Online]. Available: https://www.pnas.org/content/early/2019/09/03/1821936116.

# Today's goals

- Walk through the <u>logistics</u>
- A very brief introduction to Julia
- Try to finish Task 1

#### Introduction to Julia

- Julia is a high-level, high-performance programming language.
- "The programming language of the 21st century"
- Why?

# Why Julia

- Fast: LLVM.
- Memory efficient
- Open source
- Support Latex
- Packages
- <u>Tutorials</u> and <u>Documentations</u>
- But, the community is not quite large as Python.

### Add Julia kernel to Jupyter notebook

First you need to add IJulia package by: ] add IJulia

- 1. using Ijulia
- notebook()

Or type "jupyter notebook" in terminal.

### Add Julia client in Atom

- 1. Go to settings -> Packages -> julia-client -> Julia Path
- 2. Change it to where Julia is installed, for example, my path is: /Applications/Julia-1.6.ap.p/Contents/Resources/julia/bin/julia.