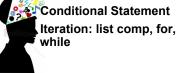# Review

David E. Culler

CS8 – Computational Structures in Data Science

http://inst.eecs.berkeley.edu/~cs88

Lecture 5

Feb 29, 2016

Computational Concepts Toolbox

- **Data type: values, literals, operations,**
- **Expressions, Call expression**
- **Variables**
- **Assignment Statement**
- **Sequences: tuple, list**
- **Data structures**
- **Tuple assignment**
- **Call Expressions**
- **Function Definition Statement**
- **Conditional Statement**
- **Iteration: list comp, for, while**

- **Higher Order Functions**
  - **Functions as Values**
  - **Functions with functions as argument**
  - **Assignment of function values**
- **Higher order function patterns**
  - **Map, Filter, Reduce**
- **Function factories – create and return functions**
- **Recursion**
  - **Linear, Tail, Tree**

Administrative Issues

- **Cuke Tourney => leaderboard**
- **Midterm Friday 3/4 5-7 pm in 405 Soda**
  - **8.5 x 11 Cheat sheet (yours)**
  - **Class study key (we will provide one)**
- **Lab 04 is review**
  - **due Wed 11:59 so we can give you solutions Thursday morning (vote)**
- **HW 04 is practice test => Thurs**
  - **More review**
  - **Out Tues morning - do lab first (vote)**
- **Review Session Wed 6-8, 405 Soda**

Review Notebook