



Intro to Higher Order Functions

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CS8 – Computational Structures in Data Science

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Lecture 3

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Administrative issues

- **Tues lab session to help bio 1a**
- **Homework 2 due Tuesday**
- **Project 1 Cuke going out soon**
 - First part is homework likes



Computational Concepts Toolbox

- **Data type: values, literals, operations,**
 - e.g., int, float, string
- **Expressions, Call expression**
- **Variables**
- **Assignment Statement**
- **Sequences: tuple, list**
- **Data structures**
- **Tuple assignment**
- **Call Expressions**
- **Function Definition Statement**
- **Conditional Statement**

Iteration:

- data-driven (list comprehension)
- control-driven (for statement)
- while statement





Computational Concepts today

- 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

Big Idea: Software Design Patterns



