Classes and Inheritance

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CS8 – Computational Structures in Data Science

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Lecture 10

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Computational Concepts Toolbox

- **Data type: values, literals, operations,**

- **Expressions, Call expression**

- **Variables**

- **Assignment Statement**

- **Sequences: tuple, list**

- **Dictionaries**

- **Data structures**

- **Tuple assignment**

- **Function Definition Statement**

- **Conditional Statement**

- **Iteration: list comp, for, while**

- **Lambda function expr.**

- **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**

- **Abstract Data Types**

- **Mutation**

- **Class**

Today: class

- **Study on Designing Classes using the Hangman project as a goal**