Programming:
Basic Concepts

Topics

- Variable
- Array
- Iteration
- Function (method)
- Struct (class)
- Reference

Variable

- **Number representation**
  - ◆ Integer
  - ◆ Floating point
- **String**
  - ◆ Concatenation

Array

- Type
- Size
- Index
  - From 0 to size-1
- Access
  - By index

Iteration

- Cycles
  - While
  - For

- Scanning arrays
  - Cycle index = array index

Function / Method

- **Goal**
  - To factor common pieces of code
- **Context (*scope*)**
  - Life and visibility of local variables
- **Recurrence**
- **Storage**
  - Local
  - Global

Struct / Class

- Goal
  - To group related information
- Fields
- Accessing fields
- Array of structured data

Reference

- Reference vs. Object
  - ◆ Creation: new
  - ◆ Aliasing