Outline

- Possible Topics
Possible Topics about C++

- Namespaces
- Imperative Language (vs. Declarative Lang.)
- Object-Oriented Programming
  - Design Principles
- Separating Interface from Implementation
- C vs C++
  - Static
- Function Definitions
Possible Topics about C++ Cont’d

- Function Prototypes vs Signatures
- C++ Data Types
- Storage Classes and Scope Rules
- C++ Function Call Stack and Activation Records
- Inline Functions
- References
- Default Arguments
- Function Overloading and Templates
- Recursion
Possible Topics about C++
Cont’d

• C++ Pointers
• Constructors and Destructors
  – Copy Constructors
• const Members
• Member Initializer
• friend Functions and Classes
• Static Members
• Inheritance
• Polymorphism
  – Virtual
• Exception Handling
Possible Topics about Java

• Differences between Java and C/C++
• Java Program Execution
• Member Access Control
• Static Modifier
• Locating Classes
• Classes, Objects, and Packages
• Methods & Operators
  – Method Overloading
  – Initialization Order
• Java I/O Systems
Possible Topics about Java (Cont’d)

- Composition vs Inheritance
- Inheritance
  - Initialization
- Final
- Polymorphism
  - Upcasting
  - Downcasting
- Interface
- Exception Handling
- String, Formatter, and Scanner
- Container