

## Review

### Tree terminology

- parent, child, sibling, ancestor, descendant, subtree, leaf
- height and depth
- structure: perfect, complete, balanced
- Binary **Search** Tree property

### Tree implementation

- array-based, reference-based
- traversals:
  - in-order
  - pre-order
  - post-order
  - level-order
- deletion from a BST (conceptually)
- insert and find into a BST (implementation)

### Heaps

- **Heap-Shape** and **Heap-Order** properties
- insertion and removal from a heap
  - bubbleUp
  - bubbleDown

### Maps

- Key-value entries
- Unique keys ‘mapped’ to values
- put, get, containsKey operations

### Hash Tables

- terminology: hash-function, load factor, tombstone
- understanding of collision detection strategies:
  - Separate chaining (linked list)
  - Open addressing:
    - Linear probing
    - Quadratic probing
    - Double hashing