

Maps:

Below are a few different ways we could implement associative maps for storing (key, value) pairs. For each one, what is the runtime of our two main operations?

1. Linked List

- $\text{Store}(k, v)$:
- $\text{Lookup}(k)$:

2. Array sorted on the keys

- $\text{Store}(k, v)$:
- $\text{Lookup}(k)$:

3. Binary Search Tree (BST)

- $\text{Store}(k, v)$:
- $\text{Lookup}(k)$: