

Outline

Last time:

- Review of basic ADTs
- PA1 Walk Through

Today:

- Continue PA1 Walk Through
- Dictionary ADT
- Hashing

Dictionary ADT

Table lookup: look up a key in a table

The *key* is associated with some other information (*value*)

Key space is usually more structured/regular than value space,
so easier to search

An *entry* is a $\langle \text{key}, \text{value} \rangle$ pair

For example: $\langle \text{title}, \text{mp3_file} \rangle$

Usually the ADT stores pointers to entries

Searching for Items

Two types of search:

- entry search: pointer comparison
- key search: value comparison

Types of dictionary:

- unordered list
- ordered list
- unsorted list
- sorted list

What is the difference between an ordered and a sorted list?

Adding entry to an ordered (sorted)

list must retain the ordered (sorted) property of the list