Choosing the Right Data Structure

Need to store data?

Ordered sequence?

Use LIST

Examples:

- Stock prices over time

- List of tickers

Key-value mapping?

Use DICTIONARY

Examples:

- Stock ticker → price

- Portfolio holdings

Feature Comparison

List	Feature	Dictionary
Ordered	Order	Unordered
prices[0]	Access	portfolio["AAPL"]
O(n) search	Speed	O(1) lookup
Duplicates OK	Duplicates	Unique keys
Integer indices	Keys	Any immutable
append(), sort()	Methods	get(), keys()
[1,2,3]	Syntax	{"a": 1, "b": 2}