#### Data Structures

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## Who am I?



# Outline

1 Introductory Data Structures

Array Linked List Hash Table Heap Red-Black Tree

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- 2 Java Collection API & Map API Java Collection API Java Map API
- 3 Advanced Data Structures Stuff...



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# Data Type vs. Data Structure

▶ Data type ≠ data structure

# Data Type vs. Data Structure

- ightharpoonup Data type  $\neq$  data structure
- ▶ java.util.HashSet vs. hash table
- array vs. array

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# Tree

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# Binary Heap

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# Binary Min-Heap



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## Red-Black Tree

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#### Java Collection API

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# Java Map API

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