

## Page and File structures

- From the notes...
  - RID
  - Heap files
  - Sorted files
  - Hash files
  - Index files

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## Indexes

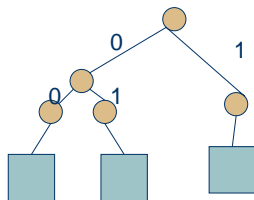
- ISAM
- B+-trees
- Hashing

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## Dynamic Hashing (Larson'78)

- Don't use arrays, use a prefix-based index structure such as tries:

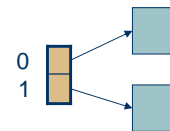


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## Extendible Hashing (Fagin et al'79)

- Use a directory which doubles on demand:

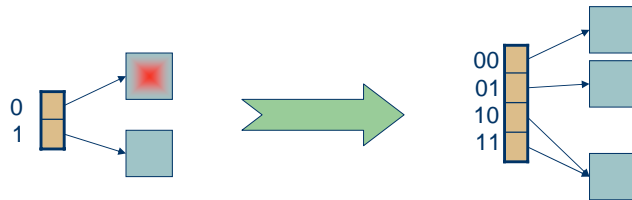


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- Use a directory which doubles on demand:

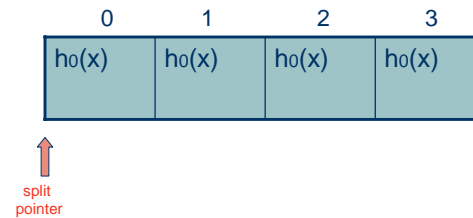


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## Linear hashing (Litwin'80)

- Augment the hash table one slot at a time
- Two hash functions and a split pointer
  - $h_0(x) = x \bmod N$
  - $h_1(x) = x \bmod 2N$

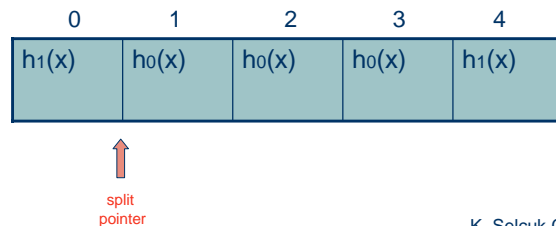


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2

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