Dropbox-Like Storage

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Simple Filesystem

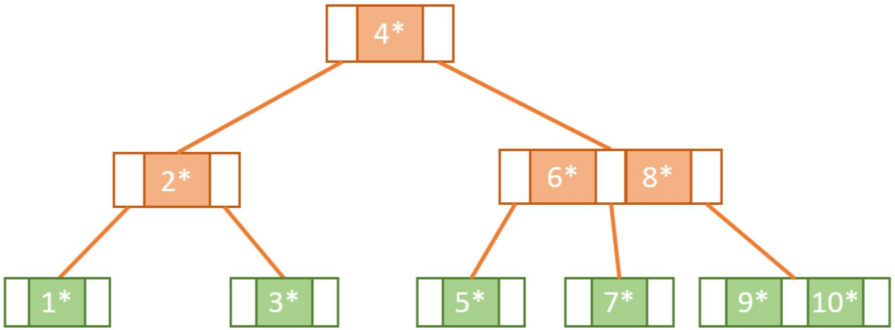
Files separated into chunks stored on disk, some files might share chunks

Queries

- Create: new file is loaded and added to data structure
- Find: request to download file, chunks are found and returned to user
- Delete: file is removed from system, any chunks deleted
- Update: change data within a file
- List: lists the names of existing files in directory
- Move: change the directory of a file

Data Structures for File System

- N-Node Tree for file metadata - indexed by file name
  - Directory location based on tree path
  - Chunk details stored in LinkedList:
    - Indexes of chunks for each file
- B+-Tree for file chunks - indexed by chunk name
  - Location of chunk (address)
  - Count of associated files



References

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