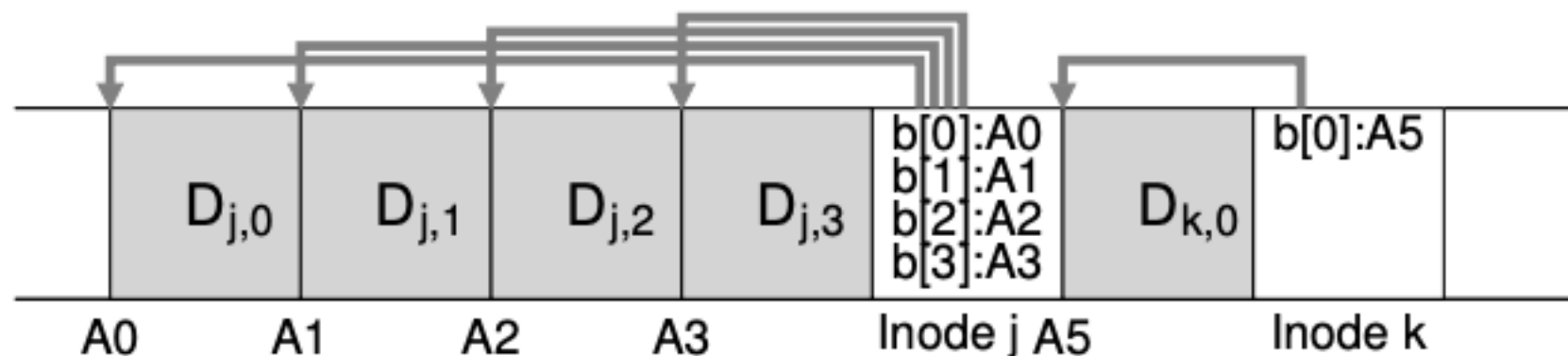# Solution 2 - Log Structure File System (LFS) or (Copy-On-Write Logging)

Idea - treat disk like a tape-drive

   1. Buffer all data (including inode) in memory segment

   2. Write buffered data to new segment on disk in a sequential log

➡ Existing data is not overwritten
Segment is always written in free location

✓ Best performance from disk for sequential access

LFS - how to find the inode table?

Original Unix File System
the inode table is placed at fixed location

Log-structured File System
the inode table is split and spread-out on the disk

➡ LFS requires an inode map (imap) to map the inode
   number with its location on disk