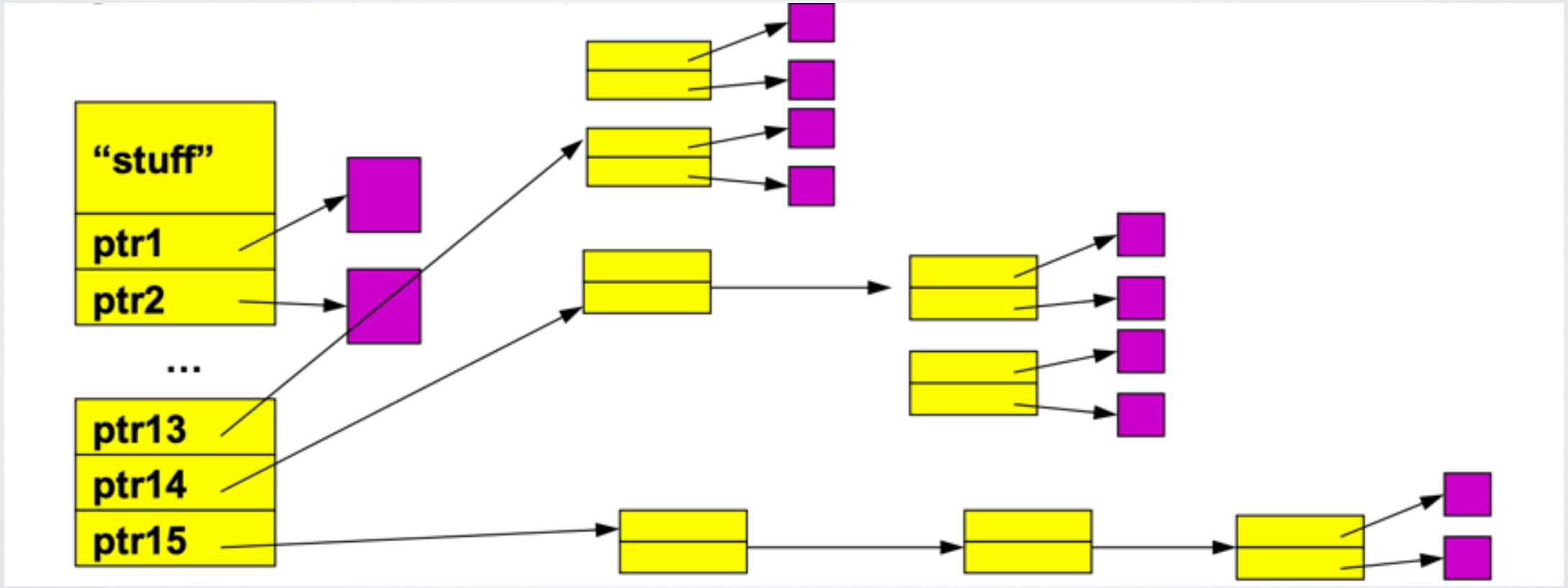
Multi-level indexed files : Unix File System

- First 12 pointers are direct blocks
  solve problem of first blocks access slow
- Then single, double, and triple indirect block pointers



File size with multi-level indexed files

File size using 12 direct blocks : 12 x 4 KB = 48 KB

- ➡ Adding single indirect block : (12 + 1024) x 4 KB ~ 4 MB
- ➡ Adding a double indirect block :
  (12 + 1024 + 1024^2) × 4 KB) ~ 4 GB
- ➡ Adding a triple indirect block :
  (12 + 1024 + 1024^2 + 1024^3) × 4 KB) ~ 4 TB