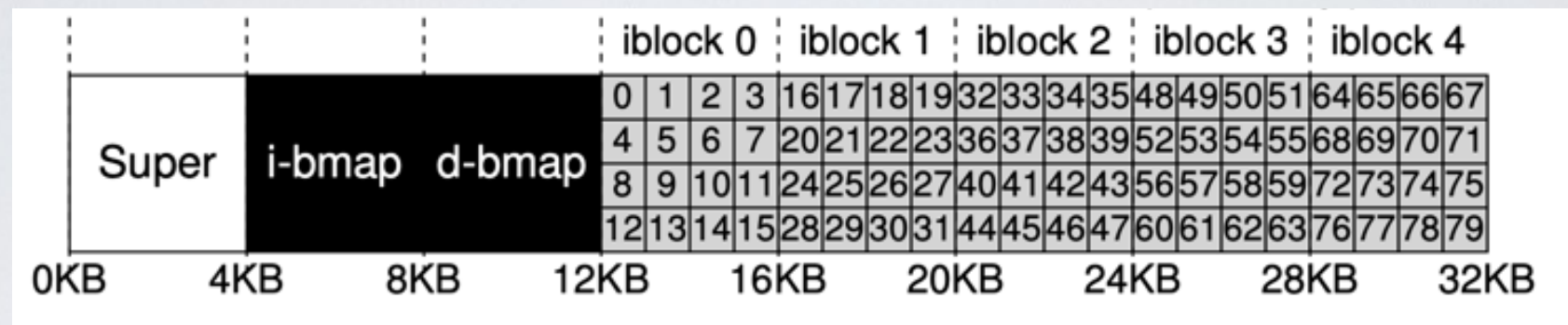


Decoding inodes



What disk sector to read to retrieve inode 32?

1. Calculate the offset (each inode is 256 bytes)
 $32 \times 256 = 8,192$
2. Add the start of the address of the inode table (12K)
 $8,192 + 3 \times 4 \times 1,024 = 20,480$ (20 KB)
3. Find the corresponding disk sector (each sector is 512 bytes)
 $(20 \times 1,024) / 512 = 40$

Unix Inode (simplified)

Size	Name	Description
2	mode	can the file be read/written/executed
2	uid	file owner id
4	size	the file size in bytes
4	time	time the file was last accessed
4	ctime	time when the file created
4	mtime	time when the file was last modified
4	mtime	time when the inode was deleted
2	gid	file group owner id
2	links_count	number of hard links pointing to this file
4	blocks	the number of blocks allocated to this file
60	block	disk pointers (15 in total)
4	file_acl	ACL permissions
4	dir_acl	ACL permissions