

# File Systems

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# Structure

- ▶ One block has the size of 4 kb.
- ▶ In the first block the address to the next free block is stored
- ▶ In the first block is also the address of every file stored, that points to the headerblock of the file

# Create new File

- ▶ For every file we allocate 3 blocks
- ▶ In the headerblock of a file are meta data and the addresses to the contentblocks of the file
- ▶ Add the pointer to the new file to the very first block of the whole system.

# Increase

- ▶ If the allocated blocks are full, the new Block is taken from the very first Block and is replaced with a new free Block.
- ▶ If a block is nearly full, the address to the next block is stored in the first block of the file

# Sequentially

- ▶ In the headerblock are the addresses to the contenblocks.

# Seek

- ▶  $\text{Parameter} / 4\text{kb} = \text{blocks to skip}$

# Size decreases

- ▶ If one block gets freed by this process, the block will be given free and can be used for something else
- ▶ The address which points to this block gets deleted
- ▶ The address of the freed Block gets compared with the address of the next Free which is stored in the very first Block and is replaced if it is smaller

Thank you for your attention!