Steps to use disk in operating system

- Install drive (physical)
- Partition drive
- Create file system(s) on partition(s)
- Mount file system(s) in root file system
- Use file system(s)
- Unmount file system(s)
- PC style machines use Dos partitions.
- Up to 4 primary partitions in the partition table.
- One of the 4 slots can be used for an extended partition. Extended partition is not directly used by OS.
- Any number of logical partitions may be created inside the extended partition.
- Partition numbers 1, 2, 3, 4 only used by primary or extended. First logical is #5, even if other numbers not used.
- Tools: parted, fdisk, sfdisk
- Data organized for OS.
- Superblocks store filesystem metadata. e.g. i-node list, free list, journal
- Block size, # of i-nodes, other parameters set at creation time.
- Reserved blocks, other parameters may be modified later.
- Tools: mkfs -t ext4, mount, umount, tune2fs
- **VFAT**: Flash drives, cameras, other "lowest common denominator" settings.

- **NTFS**: Windows default.

- **Tools**: `mkfs -t vfat`, `mount`, `umount -t ntfs`
Other Tools/Info

- `lsdev`/`fstab` controls boot-time mounts
- `mkfs` to make file systems
- `mount`, `umount`
- Mount point is directory. Should be empty.