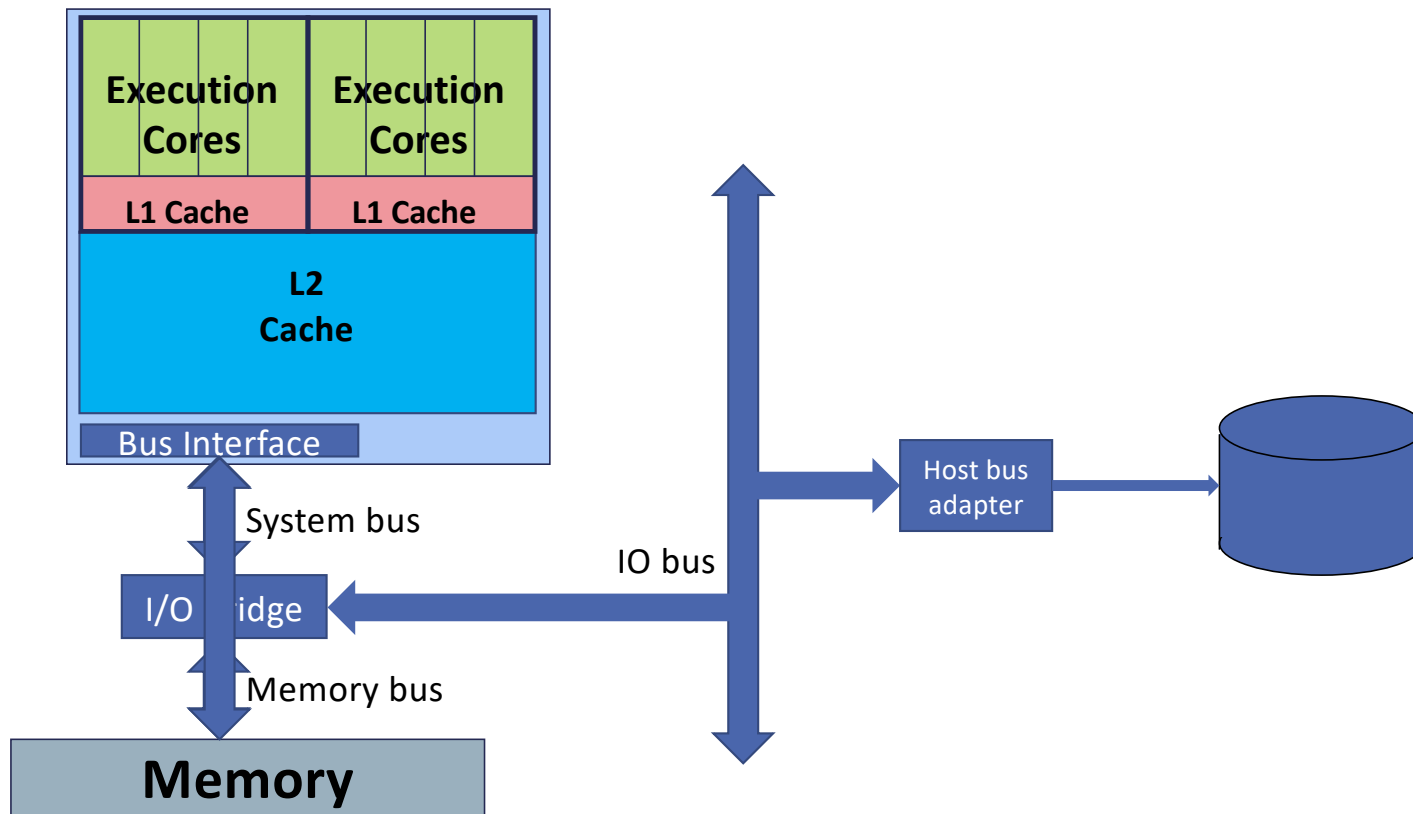


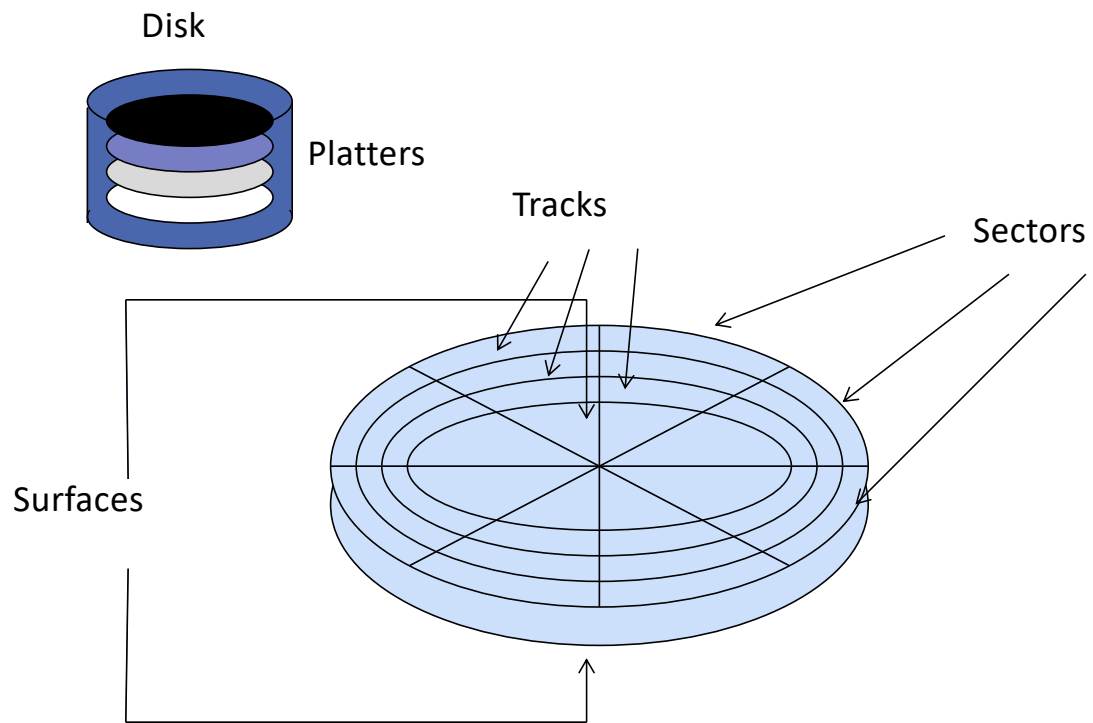
# Today

- Learning Outcomes
  - Describe how a disk works
  - Given how disks work, identify the key design criteria that file systems might use to maximize performance of the disk system.
- Reading
  - 6.1.2, 6.1.3, 6.1.4

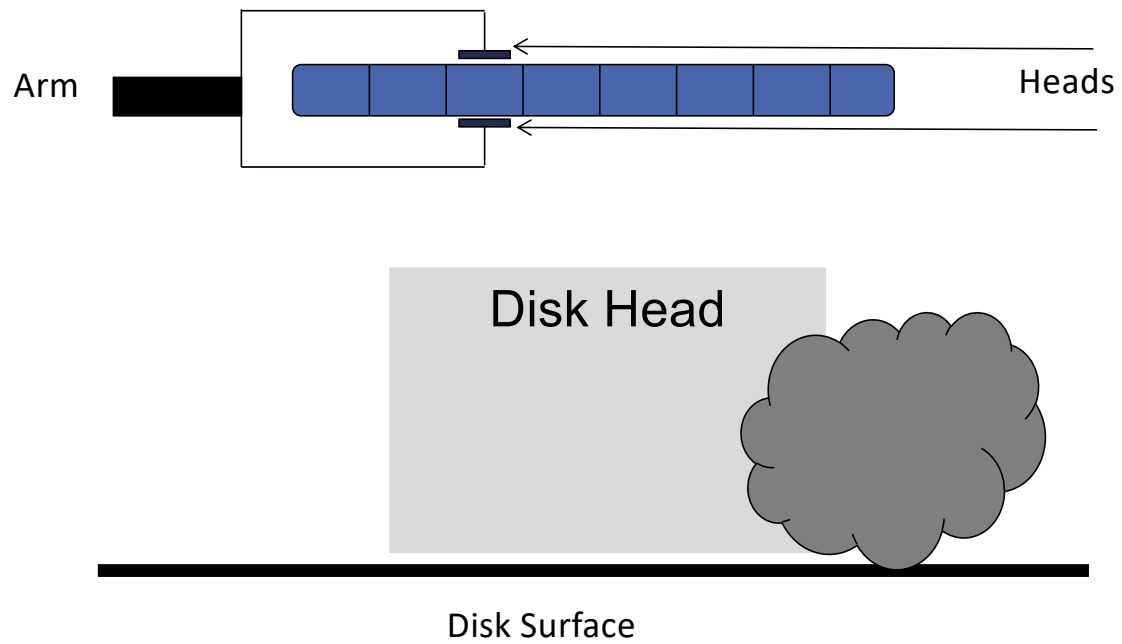
# Extending our View of a Computer System



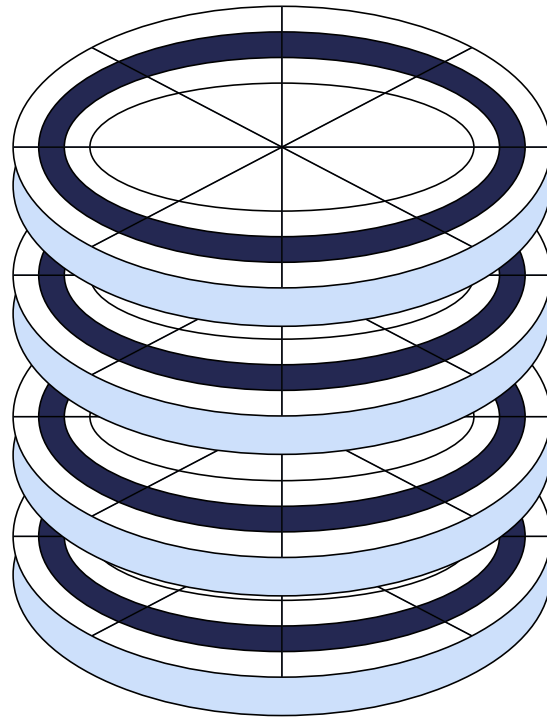
# Modern Disk Drives



# Disk Heads



# Disk Sector Numbering



# Disk Drive Performance

- Speed of a disk drive is a function of:
  - RPM (7200 – 10,000)
  - Size of the device (1.8" – 3.5")
  - Density (bits per track; tracks per inch) 500-600Gbit/in<sup>2</sup>

