#### File management

- touch, mv, rm
- chmod: permission bits
- In: symbolic/hard link

# **Shell programming**

- · Passing arguments
- · Exit values:
  - o demo: echo alice; echo \$? ; rm filenamedttt; echo \$?`
  - o exercise:
    - 1. touch file111; rm touch file111; echo \$? what is the output?
    - 2. what do you need to do to make echo \$? printout 1
  - o homework:
    - 1. makedir fff; echo \$?; makedir fff; echo \$?; why is output different?
- Commenting

## **Redirection/Piping**

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# **Grep & Find**

# **Process Management**

- ps
- top
- · Background processes