POLL:

1. vim
2. emacs
3. I have no idea what you are talking about

SSH (CONT.)

- Annoying to enter password everytime!
- Setting up ssh keys
    1. Check for existing
       `ls -al ~/.ssh`
    2. Generate new keys
       `ssh-keygen` -> generates public and PRIVATE keys
    3. Add public key (`id_rsa.pub` by default) to remote server in the file
       `~/.ssh/authorized_keys`
       `ssh-copy-id -i "username@hostname"`

HAVING ISSUES WITH SSH-KEYS? -- COMMON PROBLEMS

- Windows users will need to use something other than command prompt
    - git-bash (bash shell that comes with git for windows)
    - Ubuntu terminal - you can get this from the Windows app store
- Errors about the authorized keys file:
    - Not existing: make the file with
      ```
      touch ~/.ssh/authorized_keys
      ```
    - Wrong permissions:
      ```
      chmod 600 ~/.ssh/authorized_keys
      ```

HAVING ISSUES WITH SSH-KEYS? (CONT.)

- If for some reason you can use `ssh` and `ssh-keygen` but don't have `ssh-copy-id`
    - Move `id_rsa.pub` to remote machine:
      ```
      scp ~/.ssh/id_rsa.pub username@hostname:~
      ```
    - SSH into remote machine and add public key to `authorized_keys`:
      ```
      ssh username@hostname

      cat id_rsa.pub >> .ssh/authorized_keys
      ```

REDIRECTING STDIN/STDOUT/STDERR

- stdin - what you type into terminal
- stdout - terminal screen
- stderr - also goes to terminal screen
- Redirecting stdin: <
- Redirecting stdout:
    - > overwrite
    - >> appends
- Redirecting stderr: 2>

BASIC FILE MANIPULATION

- `cut` - accessing specific fields from delimited files
- `tr` - translating characters in files
    - Examples:
        - Replace `a`s with `b`s `tr a b`
        - Upper to lowercase
          `tr [:upper:] [:lower:] < inputfile`
          `tr [A-Z] [a-z] < inputfile`
        - Delete characters `tr -d 'N'`