File Systems

* Describe the permissions represented by -rw-r--r--.
  + CHMOD
  + User / Groups / Global
  + Permissions are in binary
  + rw- would be 110 or 6
  + First – denotes the type of file. – is regular, ‘c’ is character, ‘d’ is directory, etc.
* Describe the permissions represented by "755".
  + User- Read / Write / Execute (111)
  + Groups (local) – Read / Execute (101)
  + Global – Read / Execute (101)
* Describe what the "umask" in Linux does.
  + Determines initial file permissions for newly created files and folders.
* Use UNIX "redirection" to read input from the Standard Input file, stdin, and/or write output to the Standard Output file, stdout, and/or the Standard Error file, stderr.
  + Int pipe (int filedex[])
  + Fildes int[2] – file descriptor identifies pipe.
  + If pipe call successful
    - Filedes[0] – opened for reading from the pipe
    - Filedes[1] – opened to write to the pipe
* Use UNIX "pipe" commands to execute a chain of Unix programs, where the output of program "i" is used as input to program "i+1".
  + Create pipe
  + Fork to create reading child
  + In child, close the writing end of the pipe and do any other preparations
  + In child, execute child program
  + In parent, close the reading end of the pipe
  + If a second child is to write to the pipe, create child and execute the program
  + If the parent is to write, do so at this time, etc., etc.
* Given a graphical (tree) representation of a Linux file system, and an indication of which directory is currently '.', and which directory is currently the "target", write a cd command to move from the current directory to the target directory.