Writing a shell

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What is a shell

- A shell is a program that:
  - Reads a command line
  - Parses the command line to find the basic commands and their arguments
  - Executes the commands (typically by creating child processes)
  - It has a script language … not to be covered in this discussion
  - Examples: csh, sh, bash

Shell commands

- Built-in commands
  - These are built-in system calls
  - Example: chdir(), getcwd()
- External commands (executables)
  - These are available as executable files
  - Example: ls, vi

Assignment-7

- Write a shell program having the following features:
  - The cd and pwd commands
  - All executables present in the path
  - Commands of the form a | b where a and b are executables, and | is the pipe operator
  - A history of 10 previous commands (indexed as 0 through 9). The command !n should execute the n^{th} command in the history