Building instructions

1. Change the current working directory to the project (folder “CS-281-Project”)
2. Run cmake by typing “cmake .”
3. Build the executable by typing “make”
4. Run the executable by typing “./mainClass”

Using the program

* Run a foreground process through the shell:
  + Type the name of the program followed by arguments to be passed in
  + Example: echo “hello”
    - This should print out hello in the console
* Run a process in the background
  + Type the name is the program followed by its arguments; include a “&” sign in any part of the command
  + Example: sleep & 5s
    - This should suspend execution in the background for 5 seconds while still allowing users to run foreground processes. After 5 seconds, the console should print out a message showing if the process has exited successfully with its pid.
* Run a background process with auto recovery mode
  + Type the name of the program followed by its arguments, then followed by “- -autorecovery”
  + Example: echo & “hi” - -autorecovery
  + This should print out “hi” repeatedly followed by the message “Child x exited successfully”, where x is the child pid of the process.
  + Note that the running process can be killed by using the kill command followed by the pid of the process, in which case the process will not auto recover again.
* Query the status of previously launched process
  + Type “ps” in the shell
  + This should prints out a table showing information on all the previously launched processes, including the process name, its status, and its exit status
* Change current working directory
  + Type “cd” followed by the subdirectory
* Exit the shell
  + Type “exit”