2a

Parent

child

fork

close fd1[1]
close (0)
dup(fd1[0])

close fd1[0]
close (1)
dup (fd1[1])

grand child

gpid=fork

write (fd[1], &gpid, sizeof(int))

close fd2[1]
close (0)
dup (fd2[0])
execvp ("ls -1")

close (fd2[0])
close (1)
dup (fd2[1])
execvp ("wc")

close fd1[0]
close fd1[1]

finish

finish

wait gpid

wait child.

finish

'finish

Parent

fork | 1 | 2

close fds [1]
close 0
dup fds [0]
execvp ("wc")

close fds 0
close 1
dup fds 1
execvp("ls -l")

finish

finish

close fds[0]
close fds [1]

waitpid (1)
waitpid (2)
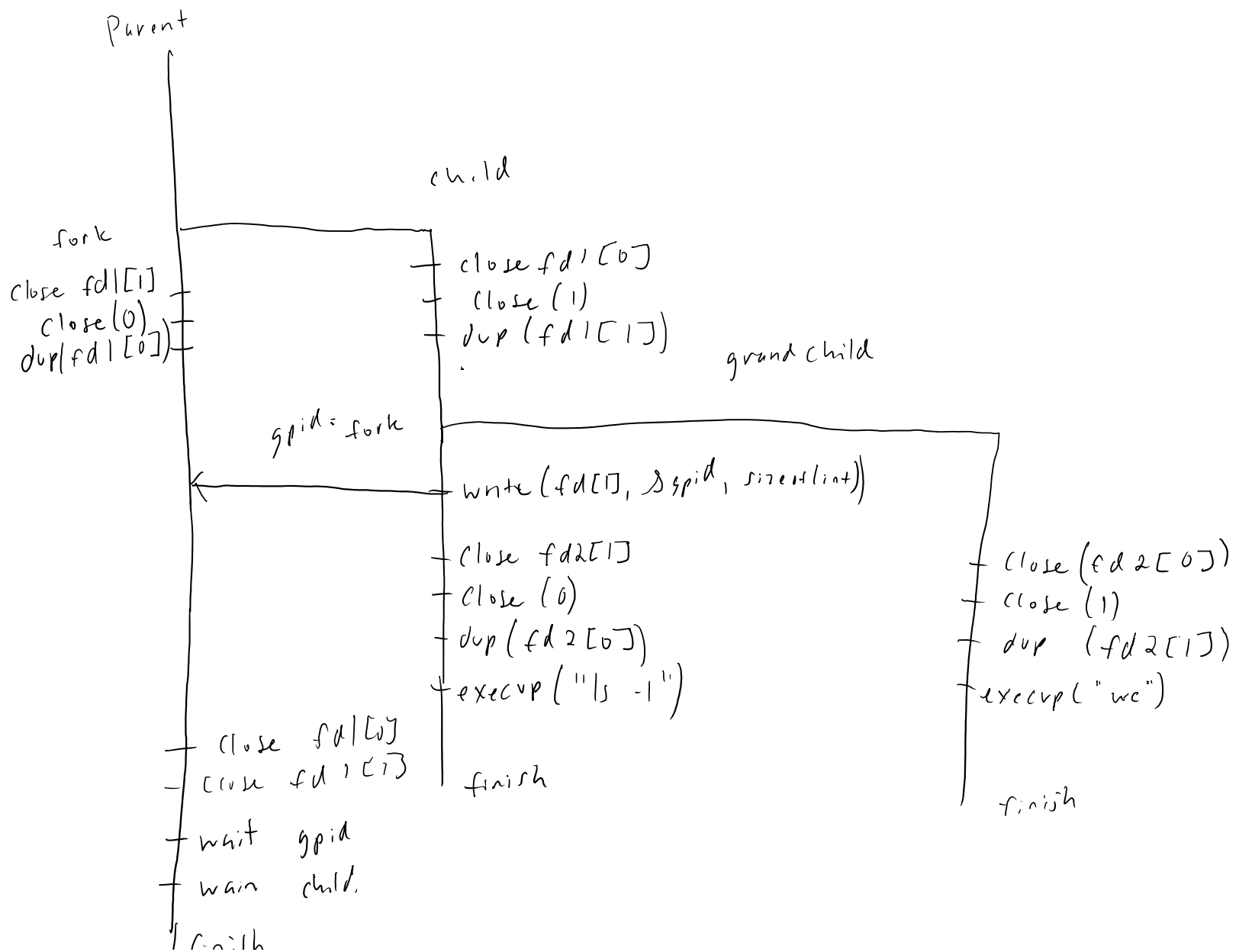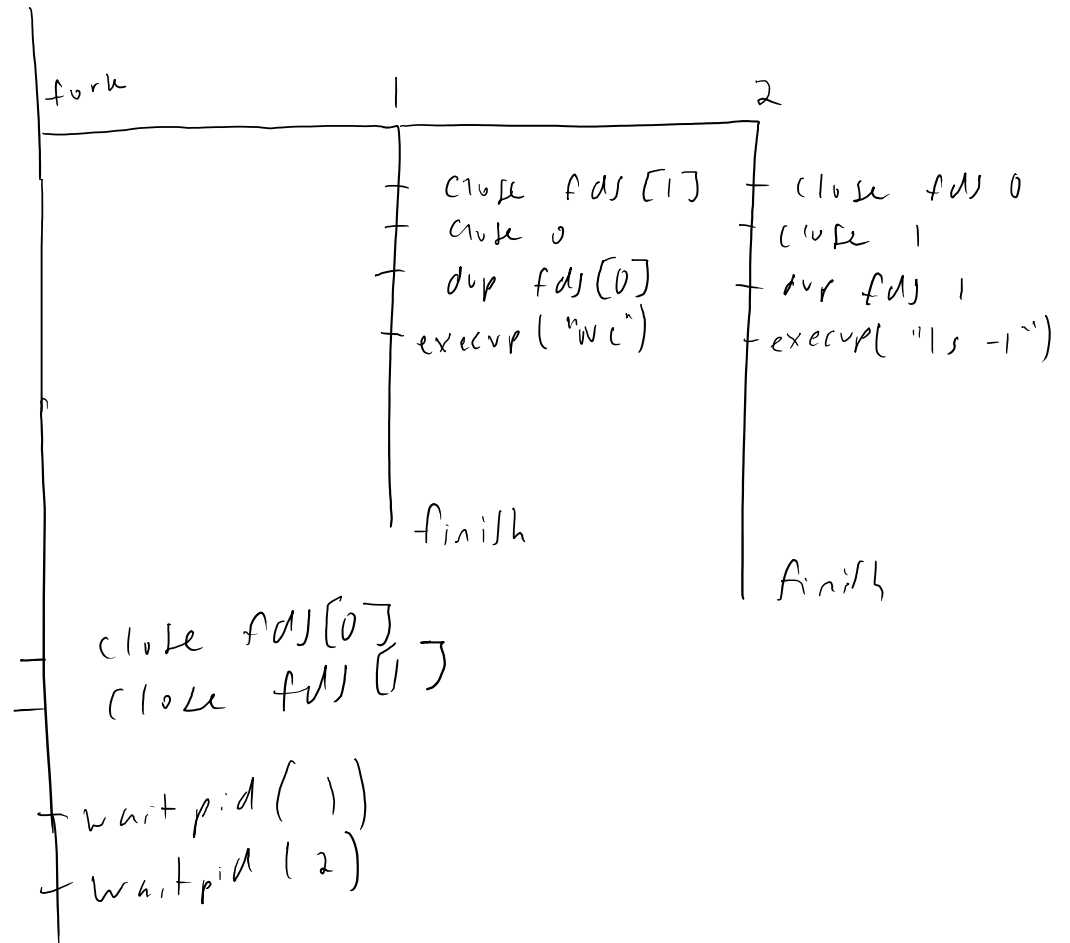
2B.
Option 2 is preferable because it only requires one pipe, and it requires less code and effort to design. It is also a pain to have to send the grand child's pid back to the parent so that it can wait for the both the child and grandchild to finish.