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This is a report of the assignment 1 of ECSE 427. I will be answering concisely, because I have ran out of time. If you have any questions, feel free to ask me. Thank you.

- I. The shell would not crash when a command crashes, rather an error would be shown
- II. The system calls used are `execve`, `mmap`, `Mprotect` and `mmap`
- III. `my_system()` and `system` behaves differently after using `Fork`, because now we have two processes, where the child executes the program and stops while the parent keeps running. In `system()`, we only had one process running
- IV. For `VFORK`, `ls` took 4 ms while `mkdir` took 6 ms
- V. For `cd`, the child and parent need to share the same file directory , thus `CLONE_FS` flag needs to be used. I also used `CLONE_VFORK` to the processes in the same memory.
I tried to use the `chdir` process for `cd`, through an `execl` call in the child process. Although I could not finish it, I tested that this would perform the task of `cd`, if provided the proper directory. Once, child would end, the parent would return to the original directory.