

## Project 2 Report:

### Phase 1:

- When ./shsh is started, parse the incoming input.
- Check for cmd or pipe or exit after splitting input.
- If cmd then call system() with the content after cmd
- If pipe then call method pipeline with params:
  1. Array of commands after splitting using ‘;’,
  2. No of commands
- -In pipeline method, use one pipe to connect parent and child process through fork().  
-In the child process write each command using system() call  
-In parent process read and store the result in a temp file descriptor that can be used in the child process as input for next command
- If exit then terminate the shell

```
root@DESKTOP-BP2IKII:/mnt/c/Users/ashwi/Desktop/OSProject2# ./shsh

Shsh process 1864 has been created by the process 6
cmd> cmd ls

Shsh processing cmd ls
UM      UMcop.c  fileashwin  forkex.c  geeks      hello2.txt  mycode      newgrep.c  pipe2      pipeDupFork.c  shsh.c      shshCopy.c
teststring.c
UM.c     UMod.c   find       forttest  geeks.c    hello23.txt  mycode.c    out        pipe2.c      readme.txt   shshCopy    somefile.txt
twopipes
UMcopy  cpans.c  forkex     forttest.c hello.txt  ls          newgrep     output.txt  pipeDupFork  shsh         shshCopy.c  split
      teststring twopipes.c
cmd> pipe ls; grep hel; grep hello2; cat>myout.txt

Shsh processing pipe ls; grep hel; grep hello2; cat>myout.txt

Shsh forked 1867 for  ls, with in-pipe 3 and out-pipe 4

Shsh forked 1870 for  grep hel, with in-pipe 4 and out-pipe 5

Shsh forked 1873 for  grep hello2, with in-pipe 5 and out-pipe 6

Shsh forked 1876 for  cat>myout.txt, with in-pipe 6 and out-pipe 7
cmd> exit

Shsh processing exit

Shsh process 1864 terminates
root@DESKTOP-BP2IKII:/mnt/c/Users/ashwi/Desktop/OSProject2#
```