

NYCU OS HW1 report 2021

Name

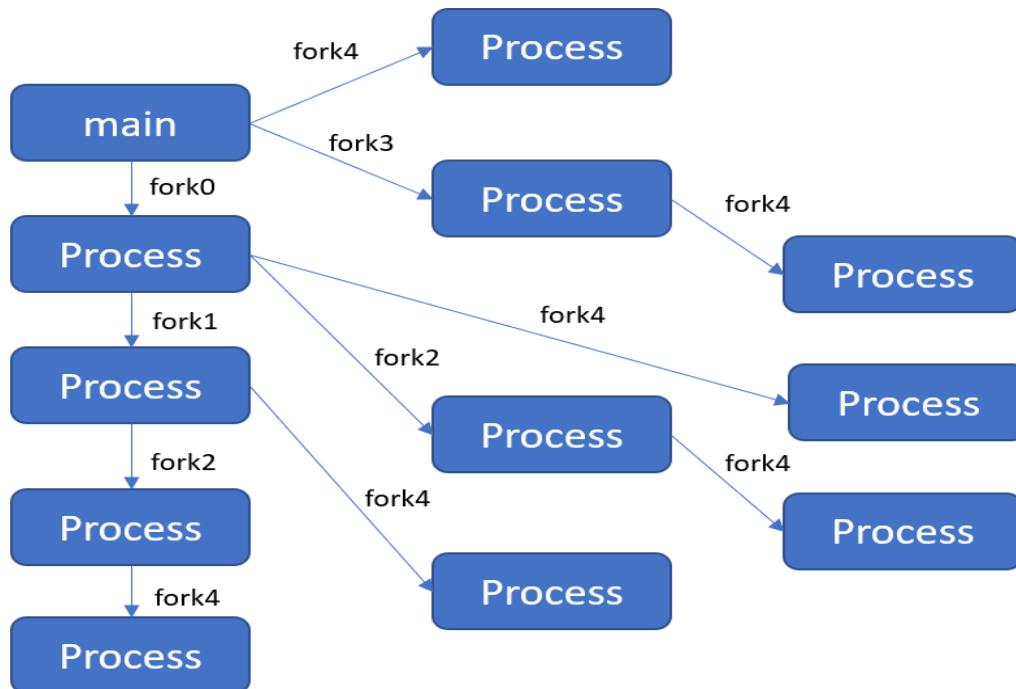
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Student Id

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Q1. hw1_1

Tree format(according to OS_HW1.pdf/p.7):



Q2. hw1_2

Please put your result(screenshot).

Also, write down the problems you met and solutions.

Result:

```
[lihos870925@linux1 ~]$ ./a.out
Main process ID : 2279242

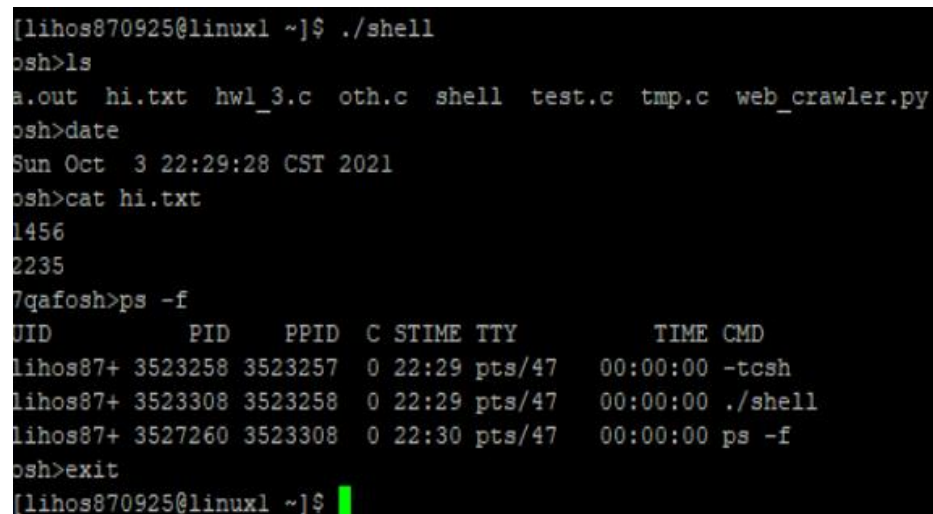
Fork 1. I'm the child 2279243, my parent is 2279242.
Fork 4. I'm the child 2279244, my parent is 2279243.
Fork 5. I'm the child 2279245, my parent is 2279244.
Fork 2. I'm the child 2279246, my parent is 2279242.
Fork 3. I'm the child 2279247, my parent is 2279246.
Fork 3. I'm the child 2279248, my parent is 2279242.
[lihos870925@linux1 ~]$
```

Problems & Solutions:

因為不太熟 `fork()`,以前只會用 code 轉樹狀圖的題目，但現在題目是用樹狀圖轉為 code，所以試了蠻多次(例如，哪裡要加 `if`，並且在裡面放 `fork()`)，不過很快就把基本架構建立好了。基本架構建好之後就是 `wait()`要填在哪裡的問題。雖然這影響輸出的順序，但基本架構建好之後這個就不算太大的問題。

Q3. hw1-3

Please put your result(screenshot).



```
[lihos870925@linux1 ~]$ ./shell
osh>ls
a.out hi.txt hwl_3.c oth.c shell test.c tmp.c web_crawler.py
osh>date
Sun Oct  3 22:29:28 CST 2021
osh>cat hi.txt
1456
2235
7qafosh>ps -f
UID          PID    PPID  C STIME TTY          TIME CMD
lihos87+  3523258 3523257  0 22:29 pts/47      00:00:00 -tcsh
lihos87+  3523308 3523258  0 22:29 pts/47      00:00:00 ./shell
lihos87+  3527260 3523308  0 22:30 pts/47      00:00:00 ps -f
osh>exit
[lihos870925@linux1 ~]$
```