Q1)

```c
C q1.c
 6
 7   int main(){
 8
 9       int pid = getpid();
10       int ppid = getppid();
11       int r;
12
13
14       printf("main program: pid=%d    ppid=%d\n", pid, ppid);
15       r = fork();
16       if (r == 0){
17           printf("child process: pid=%d   ppid=%d\n", getpid(), getppid());
18       }
19       r = fork();
20       if (r == 0){
21           printf("child process: pid=%d   ppid=%d\n", getpid(), getppid());
22       }
23       r = fork();
24       if (r == 0){
25           printf("child process: pid=%d   ppid=%d\n", getpid(), getppid());
26       }
27
28       wait(NULL);
29       wait(NULL);
30       wait(NULL);
31
32       return 0;
33   }
34
```

```
osoolian_99521073@99521073:~/Desktop$ gcc -lpthread q1.c
osoolian_99521073@99521073:~/Desktop$ ./a.out
main program: pid=3989    ppid=2657
child process: pid=3990    ppid=3989
child process: pid=3991    ppid=3989
child process: pid=3995    ppid=3991
child process: pid=3993    ppid=3990
child process: pid=3994    ppid=3990
child process: pid=3996    ppid=3993
child process: pid=3992    ppid=3989
osoolian_99521073@99521073:~/Desktop$
```

```
awk: line 1: syntax error at or near |
osoolian_99521073@99521073:~/Desktop$ top -n 1 | awk ' NR > 6 {print $2}' | head
 -n 4
PID
1022
4013
1
osoolian_99521073@99521073:~/Desktop$
```