

## Problem 3.2

Sol:

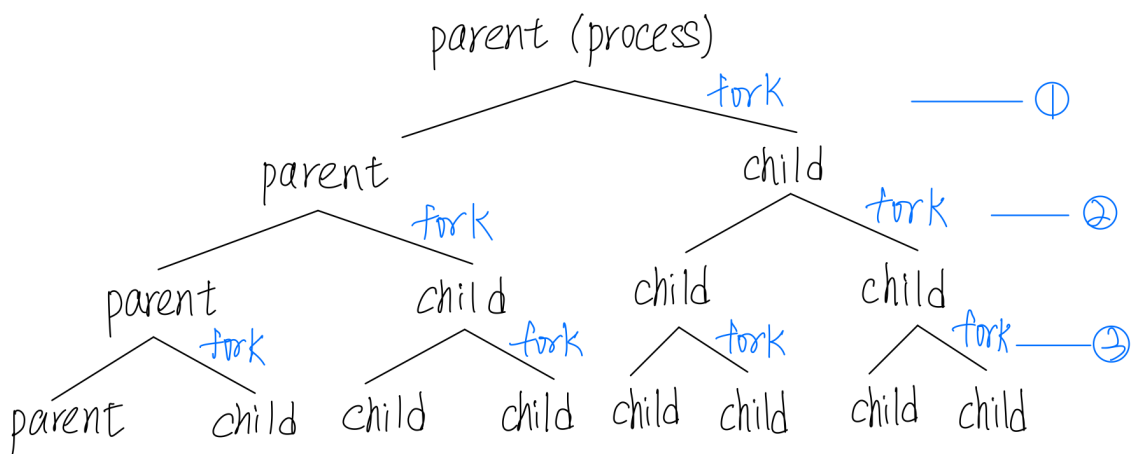
```
#include <stdio.h>
#include <unistd.h>

int main()
{
    /* fork a child process */ — ①
    fork();

    /* fork another child process */ — ②
    fork();

    /* and fork another */ — ③
    fork();

    return 0;
}
```



⇒ There are 8 processes created by the program.

### Problem 3.14

Results:

```
wayne@ubuntu: ~/Downloads/hw1
wayne@ubuntu:~$ cd Downloads
wayne@ubuntu:~/Downloads$ cd hw1
wayne@ubuntu:~/Downloads/hw1$ gcc -o hw3-14.out hw3-14.c
wayne@ubuntu:~/Downloads/hw1$ ./hw3-14.out
25
25,76,38,19,58,29,88,44,22,11,34,17,52,26,13,40,20,10,5,16,8,4,2,1
Child Complete
wayne@ubuntu:~/Downloads/hw1$
```

### Problem 3.15

Results:

```
wayne@ubuntu: ~/Downloads/hw1
wayne@ubuntu:~$ cd Downloads/hw1
wayne@ubuntu:~/Downloads/hw1$ gcc -o hw3-15.out hw3-15.c -pthread -lrt
wayne@ubuntu:~/Downloads/hw1$ ./hw3-15.out
25
Child Complete
Sequence in shared memory:
25,76,38,19,58,29,88,44,22,11,34,17,52,26,13,40,20,10,5,16,8,4,2,1
wayne@ubuntu:~/Downloads/hw1$
```