## **Programming Problems: 3.21**

**Purpose:** Implement The Collatz conjecture using fork()

Input: a number n

**Output:** a sequence that converge to 1

**OS**: Linux

**Capabilities:** check the entry is positive and integer

```
os@debian: ~/Desktop
<u>14</u>
<u>File Edit View Terminal Help</u>
os@debian:~/Desktop$ gcc -o output 3.21.c
os@debian:~/Desktop$ ./output
n: 35
35, 106, 53, 160, 80, 40, 20, 10, 5, 16, 8, 4, 2, 1, 135
Child Complete
os@debian:~/Desktop$ ./output
n : ^C
os@debian:~/Desktop$ gcc -o output 3.21.c
os@debian:~/Desktop$ ./output
n: 35
35
Child Complete
os@debian:~/Desktop$ 35, 106, 53, 160, 80, 40, 20, 10, 5, 16, 8, 4, 2, 1, 1^C
os@debian:~/Desktop$ gcc -o output 3.21.c
os@debian:~/Desktop$ ./output
n: 35
35, 106, 53, 160, 80, 40, 20, 10, 5, 16, 8, 4, 2, 1, 1
Child Complete
os@debian:~/Desktop$ gcc -o output 3.21.c
os@debian:~/Desktop$ ./output
n: 35
35, 106, 53, 160, 80, 40, 20, 10, 5, 16, 8, 4, 2, 1
Child Complete
os@debian:~/Desktop$
```