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Lab 2 – Description of Testing

In order to determine the validity of the program, the ps command was used. This command lists running processes in the linux environment. The following arguments were passed alongside the ps command to format the output to match that of the program:

$$ps\ -Ao\ pid, uid, nice$$

Where,

-A lists all running processes.

-o specifies a user defined output and is followed by the order of the process information

Figure 1 (refer to Appendix) shows the expected output while Figure 2 (refer to Appendix) depicts the output of the program. These figures were obtained by using the script command. The output from the program matches the expected output with the exception of the running processes (lab2 / ps). This is justified as the expected output runs the ps process while the program runs the lab2 process. Therefore, the program works as expected.

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Appendix

```
student@ELEC377-Student:~/E377-Wed-49/lab2$ ps -Ao pid,uid,nice
  PID   UID  NI
    1     0   0
    2     0   0
    3     0  19
    4     0   0
    5     0   0
    6     0   0
   10     0 -20
   11     0   0
   59     0   0
   62     0   0
  167     0   0
 1545     0   0
 1568     0   0
 1575     0   0
 1578     0   0
 1581    25   0
 1585  1000   0
 1586     0   0
 1587     0   0
 1588     0   0
 1589     0   0
 1590     0   0
 3396  1000   0
 3397  1000   0
 3398  1000   0
 3399  1000   0
```

Figure 1 - Expected output from the ps command

```
student@ELEC377-Student:~/E377-Wed-49/lab2$ cat /proc/lab2
Number of running processes: 1
Number of running threads: 114
PID     UID     NICE
1       0       0
2       0       0
3       0       19
4       0       0
5       0       0
6       0       0
10      0       -20
11      0       0
59      0       0
62      0       0
167     0       0
1545    0       0
1568    0       0
1575    0       0
1578    0       0
1581    25      0
1585    1000    0
1586    0       0
1587    0       0
1588    0       0
1589    0       0
1590    0       0
3396    1000    0
3397    1000    0
3398    1000    0
3400    1000    0
student@ELEC377-Student:~/E377-Wed-49/lab2$ exit
```

Figure 2 - Output from the program