

Lab4 - 01/02/2018 – OS Lab

1. Using a Linux command, print the process-ids of all the processes that are running in the system.
2. Write a program similar to the following one using three fork commands, and print the process ids of all the children that are created, as well as the parent.

```
int main()  
{fork(); fork(); fork(); }
```

Your program will also print from the child process:

- The process id
- The parent id
- The process group id

and print from the parent process:

- the process id
- the parent id
- the process group id

3. Write a program using fork(), wait() by the parent side, and execl(), execlp(), execvp(), execv() by the child side to run the ls -al command.
4. Write a program that creates a child process and prints all the prime numbers upto the given n. (n is given in the command line)
5. Write a program that creates a child process to print all the files and subdirectories of the given subdirectory xyz. (xyz is given in command-line)
6. Write a program using PThreads to create two threads t1 and t2, that takes an argument n from the command line. t1 prints all the odd numbers from 1 to n , and t2 prints all the even numbers from 1 to n