**4. Write a C program to implement the following unix/linux command (use fork, pipe and exec system call). Your program should block the signal Ctrl-C and Ctrl-\ signal during the execution.**

**ls –l | wc–l**

#include<stdio.h>

#include<stdlib.h>

#include<unistd.h>

#include<signal.h>

void sigintHandler(int sig\_num)

{

signal(SIGINT, sigintHandler);

fflush(stdout);

}

void handler(int sig\_num)

{

signal(SIGQUIT, handler);

fflush(stdout);

}

int main(){

signal(SIGINT, sigintHandler);

signal(SIGQUIT, handler);

for(;;){

pid\_t pid;

int fd[2];

pipe(fd);

pid = fork();

if(pid==0)

{

close(1);

dup(fd[1]);

close(fd[0]);

execlp("ls", "ls", "-l", NULL);

printf("Failed to execute");

}

else

{

pid=fork();

if(pid==0)

{

close(0);

dup(fd[0]);

close(fd[1]);

execlp("wc", "wc", "-l",NULL);

printf("Failed to execute");

}

else

{

int status;

close(fd[0]);

close(fd[1]);

waitpid(pid, &status, 0);

}

}

}

return 0;

}