Week 13 lab 2

Task 1)

Text

Description automatically generated

Listing:

#include <stdio.h>

#include <stdlib.h>

#include <fcntl.h>

#include <string.h>

**int** main(**int** argc, **char** \*\*argv){

**char** string[100];

**char** str[100] = "";

**char** \* end;

**char** \* begin;

**char** \* token;

printf("Enter a port range: ");

scanf("%s", string);

token = strtok(string, "-");

begin = token;

**while**(token != **NULL**) {

end = token;

token = strtok(**NULL**, "-");

}

//printf("%d, %d", atoi(begin), atoi(end));

**for**(**int** i = atoi(begin); i < atoi(end); i++) {

FILE \*fp;

**char** path[1035];

**char** s[100];

**char** port[30];

sprintf(port, "%d", i);

strcpy(s, "netstat -aont | grep \"`hostname -i`:");

strcat(s, port);

strcat(s, "\" ");

fp = popen(s, "r");

**if**(fp == **NULL**) {

printf("Failed to run command.\n");

exit(1);

}

**if** (fgets(path, **sizeof**(path), fp) != **NULL**) {

printf("Port #%d is not free\n", i);

} **else** {

printf("Port #%d is free\n", i);

}

pclose(fp);

}

**return** 0;

}