WEEK 6

Write a C program to emulate the Unix ls-l command.

Program

```
#include <stdio.h>
#include <unistd.h>
#include <sys/types.h>
#include <sys/wait.h>
#include <stdlib.h>
int main()
{
int pid;            //process id
pid = fork();     //create another processif ( pid < 0 )
{                              //fail
printf("\nFork failed\n");
exit (-1);
}
else if ( pid == 0 )
{                   //child
execlp ( "/bin/ls", "ls", "-l", NULL );  //execute ls
}
else
{                          //parent
wait (NULL);              //wait for child
printf("\nchild complete\n");
exit (0);
}
}
```

Output

```
guest-glcbls@ubuntu:~$gcc –o lsc.out lsc.c
guest-glcbls@ubuntu:~$./lsc.out
total 100
-rwxrwx—x 1 guest-glcbls guest-glcbls 140 2012-07-06 14:55 f1
drwxrwxr-x 4 guest-glcbls guest-glcbls 140 2012-07-06 14:40 dir1
child complete
```

Write a C program to list for every file in a directory, itsinode number and fill name.

Program

```
#include<stdlib.h>
#include<stdio.h>
#include<string.h>
main(int argc, char *argv[])
{
char d[50];
if(argc==2)
{
bzero(d,sizeof(d));
strcat(d,"ls ");
strcat(d,"-i ");
strcat(d,argv[1]);
system(d);
}
else
printf("\nInvalid No. of inputs");
}
```

Output

```
student@ubuntu:~$ mkdir dd
student@ubuntu:~$ cd dd
student@ubuntu:~/dd$ cat >f1
hello
 ^z
student@ubuntu:~/dd$ cd
student@ubuntu:~$gcc –o flist.out flist.c
student@ubuntu:~$./flist.out dd
hello
46490 f1
```

Write a C Program that demonstrates redirection of standard output to a file. EX:: ls>f1.

Program

```
#include<stdlib.h>
#include<stdio.h>
#include<string.h>
main(int argc, char *argv[])
{
char d[50];
if(argc==2)
{
bzero(d,sizeof(d));
strcat(d,"ls ");
strcat(d,"> ");
strcat(d,argv[1]);
system(d);
}
else
printf("\nInvalid No. of inputs");
}
```

Output

```
student@ubuntu:~$ gcc –o std.out std.c
student@ubuntu:~$ls
downloads   documents   listing.c   listing.out      std.c   std.out
student@ubuntu:~$ cat > f1
^z
student@ubuntu:~$./std.out f1
student@ubuntu:~$cat f1
downloads
documents
listing.c
listing.out
std.c
std.out
```

THANK YOU