

```

1  #include<stdio.h>
2  #include<fcntl.h>
3  /*
4  Name - Atharva Paliwal
5  Experiment no.2 - Problem Statement 3
6  */
7
8  #include<sys/types.h>
9  #include<sys/stat.h>
10 #include<dirent.h>
11 #include<unistd.h>
12 void main()
13 {
14     char buf[100];
15     char *d;
16     DIR *a;
17     int k1,k2,i,j;
18     struct dirent **arr;
19     struct stat s,s1,s2;
20     d=getcwd(buf,sizeof(buf));
21     a=opendir(buf);
22     printf("%s\n",d);
23     k1=scandir(buf,&arr,NULL,alphasort);
24     printf("%d\n",k1);
25     k2=k1;
26     while(k1-->0)
27     {
28         printf("Files name:%s\n",arr[k1]->d_name);
29         stat(arr[k1]->d_name,&s);
30         printf("Size:%ld\n",s.st_size);
31         printf("Group Id:%d\n",s.st_gid);
32         printf("Permissions:%3o\n\n",s.st_mode);
33     }
34     for(i=1;i<k2;i++){
35         stat(arr[i]->d_name,&s1);
36         for(j=i+1;j<k2;j++)
37         {
38             stat(arr[j]->d_name,&s2);
39             if (s1.st_size==s2.st_size && s1.st_gid==s1.st_gid &&
40                 s1.st_mode==s2.st_mode){
41                 printf("duplicate file %s found\n",arr[j]->d_name);
42                 unlink(arr[j]->d_name);
43                 printf("files have been deleted\n");
44             }
45         }
46     }
47 }
48
49
50 }
51

```