EX NO: 11B	**IMPLEMENTATION OF TWO-LEVEL DIRECTORY**
DATE:	

AIM:

To write a C program to implement Two-level directory structure in C.

ALGORITHM:

1.   Start

2.   Declare the number, names and size of the directories and subdirectories and file names.

3.   Get the values for the declared variables.

4.   Display the files that are available in the directories and subdirectories.

5.   Stop.

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PROGRAM:

```c
#include<stdio.h>
struct st
{
char dname[10];
char sdname[10][10];
char fname[10][10][10];
int ds,sds[10];
}dir[10];
void main()
{
int i,j,k,n;
clrscr();
printf("enter number of directories:");
scanf("%d",&n);
for(i=0;i<n;i++)
{
printf("enter directory %d names:",i+1);
scanf("%s",&dir[i].dname);
printf("enter size of directories:");
scanf("%d",&dir[i].ds);
for(j=0;j<dir[i].ds;j++)
{
printf("enter subdirectory name and size:");
scanf("%s",&dir[i].sdname[j]);
scanf("%d",&dir[i].sds[j]);
for(k=0;k<dir[i].sds[j];k++)
{
printf("enter file name:");
scanf("%s",&dir[i].fname[j][k]);
}}}
printf("\ndirname\t\tsize\tsubdirname\tsize\tfiles");
printf("\n****************************************************\n");
for(i=0;i<n;i++){
printf("%s\t\t%d",dir[i].dname,dir[i].ds);
for(j=0;j<dir[i].ds;j++)
{
printf("\t%s\t\t%d\t",dir[i].sdname[j],dir[i].sds[j]);
for(k=0;k<dir[i].sds[j];k++)
printf("%s\t",dir[i].fname[j][k]);
printf("\n\t\t");}
printf("\n");   }
   }
```

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OUTPUT:

```
😣😑⬜  mohamedinam@Mohamed-Inam-PC: ~

mohamedinam@Mohamed-Inam-PC:~$ ./twolvldir
enter number of directories:2
enter directory 1 names:cse
enter size of directories:3
enter subdirectory name and size:os 3
enter file name:aaa
enter file name:bbb
enter file name:ccc
enter subdirectory name and size:cn 2
enter file name:xyz
enter file name:mih
enter subdirectory name and size:pqt 2
enter file name:anh
enter file name:kkk
enter directory 2 names:ece
enter size of directories:2
enter subdirectory name and size:ct 2
enter file name:aav
enter file name:vcs
enter subdirectory name and size:dc 4
enter file name:afs
enter file name:ged
enter file name:eee
enter file name:ttt

dirname          size     subdirname      size     files
****************************************************
cse              3        os              3        aaa    bbb    ccc
                          cn              2        xyz    mih
                          pqt             2        anh    kkk
                 ece            2         ct              2        aav    vcs
                          dc              4        afs    ged    eee    ttt
                 mohamedinam@Mohamed-Inam-PC:~$ ▮
```

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RESULT:

      Thus a C program to implement Two-level directory structure is written and executed successfully.