Ex. No.: 12
Date: 24/04/25

AIM: **File Organization Technique- Single and Two level directory**

To implement File Organization Structures in C are
a. Single Level Directory
b. Two-Level Directory
c. Hierarchical Directory Structure
d. Directed Acyclic Graph Structure

a. Single Level

Directory

ALGORITHM

1. Start
2. Declare the number, names and size of the directories and file names.
3. Get the values for the declared variables.
4. Display the files that are available in the directories.
5. Stop.

PROGRAM:

```
# include <stdio.h>
# include <conio.h>
# include <string.h>
void main ()
{
  int nf=0, i=0, j=0, ch;
  char md[10], f[10][10], name[10];
  clrscr();
  Printf("Enter Directory Name:");
  Scanf("%s", md);
  Printf("Enter the no. of. files:");
  Scanf("%d", &nf);
```

```
do {
Printf ("Enter file name to be created :");
scanf ("%s", name);
for (i=0 ; i<nf; i++)
{ if (!Str cmp( name, f[i]))
   break;
   if (i==nf)
   {
      str cpy (f name [j++], name);
        nf++;
   }
   else
      Printf ("there is already %s\n", name);
   }
 Printf ("Do you Want to enter another file (yes-1 or no -0)");
 scanf ("%d", &ch);
 }
While (ch==1)
Printf ("Directory name is : %s\n", md);
Printf ("File names are: ");
for (i=0; i<j ; i++)
      Printf ("\n%s", f[i]);
 getch();
}
```

OUTPUT:

Enter the directory name : main
Enter the no. of files : 2
Enter file name to be created : App
Do you want to enter another file (yes - 1 or no - 0): 1
Enter file name to be created : Ban
Do you want to enter another file (yes - 1 or no - 0): 0

Directory name is : main
File names are:
App
Ban

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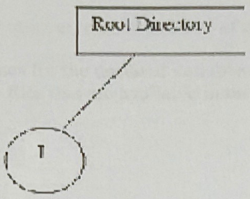
OUTPUT:

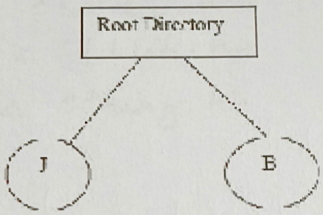
Enter the Number of files

2

Enter the file1 J



Enter the file2 B



b. Two-level directory Structure

ALGORITHM:

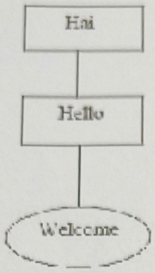
1. Start
2. Declare the number, names and size of the directories and subdirectories and file names.
3. Get the values for the declared variables.
4. Display the files that are available in the directories and subdirectories.
5. Stop.

PROGRAM:

```
# include <stdio.h>
# include <stdlib.h>
# include <string.h>
Struct File
{
  char name [100]
  int size;
};
Struct SubDir
{
  char name [100];
  struct File files [10];
  int fc;
  int to size;
};
struct Dir
{ char name [100];
  struct SubDir Subdir [10];
  int sdc;
  int To size;
};
```

Sample Output:

Enter the name of dir/file(under null): Hai
How many users(for Hai):1
Enter name of dir/file(under Hai):Hello
How many files(for Hello):1
Enter name of dir/file(under Hello):welcome



Result:

Hence the File Organization for single level and Two level Directory is implemented and executed.

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