EXP 12 - FILE ORGANISATION TECHNIQUE

SINGLE AND TWO LEVEL DIRECTORY

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PROGRAM:

Single level directory:

```c
#include <stdio.h>

struct directory{
char dname[20];
char fname[10][20];
int f_count;
};
int main(){
struct directory d;
printf("Enter directory name: ");
scanf("%s",d.dname);
printf("Enter number of files in the directory: ");
scanf("%d",&d.f_count);
printf("Enter names for files:\n");
for(int i=0;i<d.f_count;i++)
  {
    printf("Enter name for file %d: ",i+1);
    scanf("%s",d.fname[i]);
    printf("\n\t\t%s\n",d.dname);
    for (int j = 0; j <= i; j++) {
      printf("\t\t |\n");
      printf("\t\t --> (%s)\n", d.fname[j]);
    }
    printf("\n");
  }
return 0;
}
```

OUTPUT:

```
Enter directory name: SUBJECTS
Enter number of files in the directory: 2
Enter names for files:
Enter name for file 1: JAVA

                SUBJECTS
                 |
                --> (JAVA)

Enter name for file 2: PYTHON

                SUBJECTS
                 |
                --> (JAVA)
                 |
                --> (PYTHON)
```

Two level directory:

```c
#include <stdio.h>
#include<string.h>
struct directory{
char dname[20];
char subnames[10][20];
int sub_count;
};
int main()
{
struct directory d;
struct directory sub[10];
printf("Enter the name of dir/file(under null): ");
scanf("%s",d.dname);
printf("How many users(for %s): ",d.dname);
scanf("%d",&d.sub_count);
for(int i=0;i<d.sub_count;i++)
   {
      printf("Enter the name of dir/file(under %s): ",d.dname);
      scanf("%s",d.subnames[i]);
      printf("How many users(for %s): ",d.subnames[i]);
      scanf("%d", &sub[i].sub_count);
      strcpy(sub[i].dname, d.subnames[i]);

      for (int j = 0; j < sub[i].sub_count; j++) {
         printf("Enter name of dir/file(under %s): ", sub[i].dname);
         scanf("%s", sub[i].subnames[j]);
      }

   }
for (int i = 0; i < d.sub_count; i++) {
     for (int j = 0; j < sub[i].sub_count; j++) {
        printf("\t\t | %s |\n", d.dname);
        printf("\t\t |\n");
        printf("\t\t | %s |\n", sub[i].dname);
        printf("\t\t |\n");
        printf("\t\t ( %s )\n", sub[i].subnames[j]);
     }
     printf("\n");
   }
return 0;
}
```

OUTPUT

```
Enter the name of dir/file(under null): SUBJECTS
How many users(for SUBJECTS): 2
Enter the name of dir/file(under SUBJECTS): JAVA
How many users(for JAVA): 1
Enter name of dir/file(under JAVA): STRINGS
Enter the name of dir/file(under SUBJECTS): PYTHON
How many users(for PYTHON): 1
Enter name of dir/file(under PYTHON): MATPLOT
                | SUBJECTS |
                    |
                | JAVA |
                    |
                ( STRINGS )

                | SUBJECTS |
                    |
                | PYTHON |
                    |
                ( MATPLOT )
```