

EXPERIMENT-27

Develop a C program for simulating the function of ls UNIX Command.

AIM:-

To develop a C program to simulate the functionality of the ls UNIX command, which lists the contents of a directory.

ALGORITHM:-

1. Open the Directory:
2. Use the opendir function to open the specified directory.
3. Read Directory Contents:
4. Use the readdir function to iterate through the files and subdirectories in the directory.
5. Display the Contents:
6. For each file or subdirectory, print its name.
7. Close the Directory:
8. Use the closedir function to close the directory stream.

CODE:-

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
#include <dirent.h>
```

```
int main(int argc, char *argv[]) {
```

```
    DIR *directory;
```

```
    struct dirent *entry;
```

```
// Check if a directory path is provided, else use current directory

const char *path = (argc > 1) ? argv[1] : ".";


// Open the directory

directory = opendir(path);

if (directory == NULL) {

    perror("Error opening directory");

    return 1;

}


printf("Contents of directory '%s':\n", path);


// Read and print the directory entries

while ((entry = readdir(directory)) != NULL) {

    printf("%s\n", entry->d_name);

}

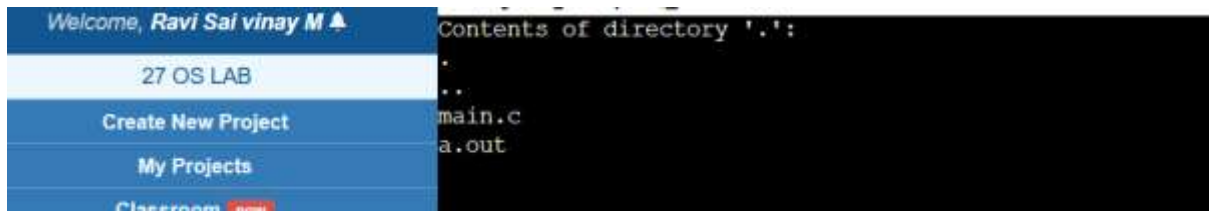

// Close the directory

closedir(directory);

return 0;

}
```

OUTPUT:-



RESULT:-

The program successfully simulated the ls UNIX command, displaying the contents of a directory specified by the user or the current directory if no argument is provided.