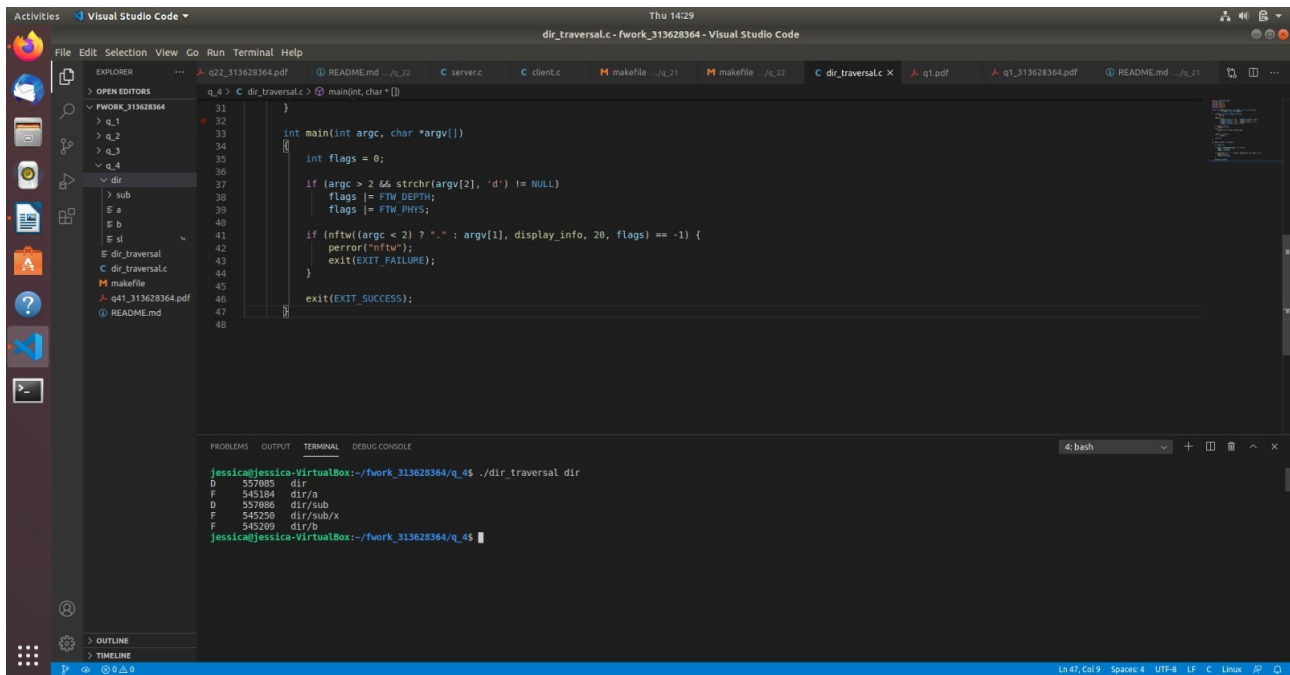


Q4:

This is the output after running the example that is given in the assignment.



The screenshot shows the Visual Studio Code interface with a C program open in the editor. The program is a directory traversal utility. The terminal output shows the execution of the program with the command `./dir_traversal dir`, which recursively lists the contents of the `dir` directory.

```
int main(int argc, char *argv[])
{
    int flags = 0;

    if (argc > 2 && strchr(argv[2], 'd') != NULL)
        flags |= FTW_DEPTH;
        flags |= FTW_PHYS;

    if (nftw(argc < 2 ? "." : argv[1], display_info, 20, flags) == -1) {
        perror("nftw");
        exit(EXIT_FAILURE);
    }

    exit(EXIT_SUCCESS);
}
```

```
jessica@jessica-VirtualBox:~/work_313628364/q_45 ./dir_traversal dir
D 557085 dir
F 545184 dir/a
D 557086 dir/sub
F 545250 dir/sub/x
F 545289 dir/b
```