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

**Aim:**

The aim of this C program is to simulate the functionality of the ls command in UNIX. The program lists the files and directories in the current directory or specified directory.

**Algorithm:**

1. Take an optional directory path as input. If no directory is specified, use the current directory.
2. Use the opendir function to open the directory.
3. Use the readdir function to read each entry in the directory.
4. Print the names of the files and directories.
5. Close the directory using closedir.

**Procedure:**

1. Include necessary headers (stdio.h, dirent.h, stdlib.h).
2. Open the directory using opendir.
3. Read the directory entries using readdir.
4. Print the filenames of the directory entries.
5. Close the directory after reading.

**Code:**

#include <stdio.h>

#include <stdlib.h>

#include <dirent.h>

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

DIR \*dir;

struct dirent \*entry;

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

dir = opendir(path);

if (dir == NULL) {

perror("opendir");

return 1;

}

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

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

}

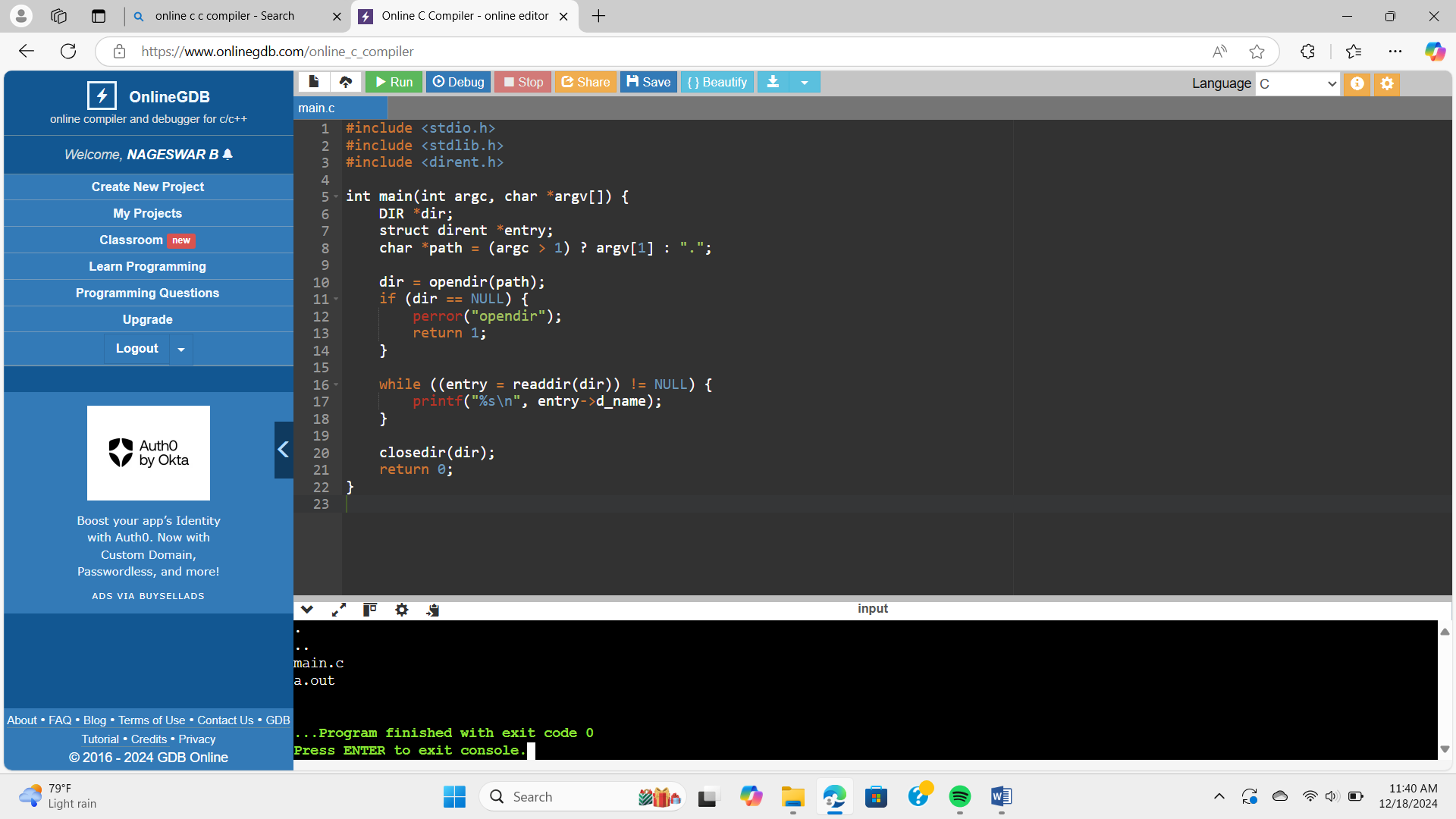
closedir(dir);

return 0;

}

### Result:

Running the program would output a list of filenames and directories in the current directory or specified directory.

**Output:**