

**24. Design a C program to demonstrate UNIX system calls for file management.**

```
#include <stdio.h>

#include <fcntl.h> // for open() and O_*
#include <unistd.h> // for read(), write(), close()

#include <stdlib.h>

int main() {

    int fd;

    char buffer[100];

    fd = open("demo.txt", O_CREAT | O_RDWR, 0777);

    if (fd < 0) {

        printf("Error opening file!\n");

        exit(1);

    }

    printf("File created/opened successfully.\n");

    write(fd, "Hello, UNIX System Calls!\n", 26);

    printf("Data written to file.\n");

    lseek(fd, 0, SEEK_SET);

    int n = read(fd, buffer, sizeof(buffer));

    buffer[n] = '\0';

    printf("Data read from file: %s", buffer);

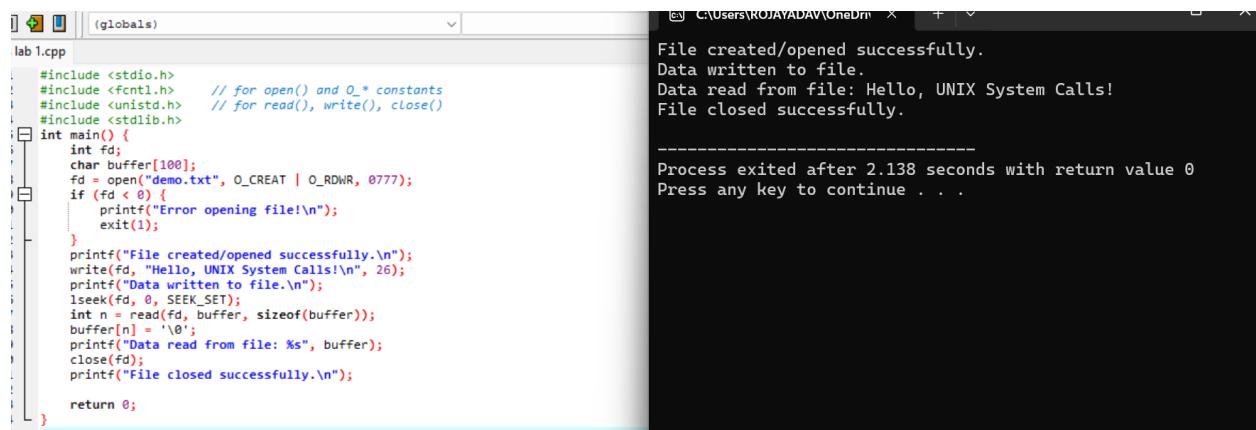
    close(fd);

    printf("File closed successfully.\n");



    return 0;
}
```

## OUTPUT-



```
lab 1.cpp | (globals) | C:\Users\ROJAVADAV\OneDrive\Documents\GitHub\Lab 1>
File created/opened successfully.
Data written to file.
Data read from file: Hello, UNIX System Calls!
File closed successfully.

-----
Process exited after 2.138 seconds with return value 0
Press any key to continue . . .
```

```
#include <stdio.h>
#include <fcntl.h>      // for open() and O_*
#include <unistd.h>      // for read(), write(), close()
#include <stdlib.h>

int main() {
    int fd;
    char buffer[100];
    fd = open("demo.txt", O_CREAT | O_RDWR, 0777);
    if (fd < 0) {
        printf("Error opening file!\n");
        exit(1);
    }
    printf("File created/opened successfully.\n");
    write(fd, "Hello, UNIX System Calls!", 26);
    printf("Data written to file.\n");
    lseek(fd, 0, SEEK_SET);
    int n = read(fd, buffer, sizeof(buffer));
    buffer[n] = '\0';
    printf("Data read from file: %s", buffer);
    close(fd);
    printf("File closed successfully.\n");

    return 0;
}
```