

## Program :-

```
#include <iostream>

#include <fstream>

#include <string>

using namespace std;

struct Student {

    string roll_no, name, division, address;

};

void addStudent() {

    ofstream file("student_data.txt", ios::app);

    Student s;

    cout << "Enter Roll No: ";

    cin >> s.roll_no;

    cout << "Enter Name: ";

    cin >> s.name;

    cout << "Enter Division: ";

    cin >> s.division;

    cout << "Enter Address: ";

    cin >> s.address;

    file << s.roll_no << "," << s.name << "," << s.division << "," << s.address << endl;

    file.close();

    cout << "Student information added successfully.\n";

}

void deleteStudent() {

    ifstream file("student_data.txt");
```

```

ofstream temp("temp.txt");
string roll_no;
bool found = false;
cout << "Enter Roll No to delete: ";
cin >> roll_no;
string line;
while (getline(file, line)) {
    if (line.find(roll_no) != 0) {
        temp << line << endl;
    } else {
        found = true;
    }
}
file.close();
temp.close();
remove("student_data.txt");
rename("temp.txt", "student_data.txt");
if (found) {
    cout << "Student information deleted successfully.\n";
} else {
    cout << "Student record not found.\n";
}
}

void displayStudent() {
    ifstream file("student_data.txt");
    string roll_no;
    bool found = false;
    cout << "Enter Roll No to search: ";
    cin >> roll_no;

```

```

string line;
while (getline(file, line)) {
    if (line.find(roll_no) == 0) {
        cout << "Student Details: " << line << endl;
        found = true;
        break;
    }
}
file.close();
if (!found) {
    cout << "Student record not found.\n";
}
}

int main() {
    int choice;
    do {
        cout << "\n1. Add Student\n2. Delete Student\n3. Display Student\n4. Exit\nEnter your choice: ";
        cin >> choice;
        switch (choice) {
            case 1: addStudent(); break;
            case 2: deleteStudent(); break;
            case 3: displayStudent(); break;
            case 4: break;
            default: cout << "Invalid choice!\n";
        }
    } while (choice != 4);

    return 0;
}

```

## Output :-

```
1. Add Student
2. Delete Student
3. Display Student
4. Exit
Enter your choice: 1
Enter Roll No: 4
Enter Name: Parth
Enter Division: C
Enter Address: Pune
Student information added successfully.

1. Add Student
2. Delete Student
3. Display Student
4. Exit
Enter your choice: 3
Enter Roll No to search: 4
Student Details: 4,Parth,C,Pune

1. Add Student
2. Delete Student
3. Display Student
4. Exit
Enter your choice: 2
Enter Roll No to delete: 4
Student information deleted successfully.

1. Add Student
2. Delete Student
3. Display Student
4. Exit
Enter your choice: 4
PS C:\Users\athar\OneDrive\Desktop\Parth\Coding\C++> |
```