

```
#include <iostream>

#include <fstream>

using namespace std;


// Function to create a new record
void createRecord() {
    int roll;

    string name, div, address;

    fstream write;

    cout << "\nEnter Roll No: ";
    cin >> roll;
    cout << "Enter Name: ";
    cin >> name;
    cout << "Enter Division: ";
    cin >> div;
    cout << "Enter Address: ";
    cin >> address;

    // Open the file in append mode to add a new record
    write.open("students.txt", ios::app);
    write << roll << "\n" << name << "\n" << div << "\n" << address << "\n";
    write.close();

    cout << "Record added successfully.\n";
}


// Function to search for a record by roll number
void searchRecord() {
    int roll, froll;

    bool found = false;
```

```

string name, div, address;

fstream read;

cout << "\nEnter Roll No to search: ";
cin >> froll;

// Open the file in read mode
read.open("students.txt", ios::in);
while (read >> roll >> name >> div >> address) {
    if (roll == froll) {
        found = true;
        cout << "\nRecord Found:\n";
        cout << "Roll No : " << roll << "\n";
        cout << "Name   : " << name << "\n";
        cout << "Div    : " << div << "\n";
        cout << "Address : " << address << "\n";
    }
}

if (!found) {
    cout << "Record not found.\n";
}

read.close();
}

// Function to delete a record by roll number
void deleteRecord() {
    int roll, froll;
    bool found = false;
    string name, div, address;

```

```
fstream read, write;
```

```
cout << "\nEnter Roll No to delete: ";
```

```
cin >> froll;
```

```
// Open the file in read mode and a temporary file in write mode
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```
read.open("students.txt", ios::in);
```

```
write.open("temp.txt", ios::out);
```

```
while (read >> roll >> name >> div >> address) {
```

```
    if (roll == froll) {
```

```
        found = true;
```

```
    } else {
```

```
        write << roll << "\n" << name << "\n" << div << "\n" << address << "\n";
```

```
    }
```

```
}
```

```
read.close();
```

```
write.close();
```

```
// Delete the original file and rename the temporary file to the original file
```

```
remove("students.txt");
```

```
rename("temp.txt", "students.txt");
```

```
if (found) {
```

```
    cout << "Record deleted successfully.\n";
```

```
} else {
```

```
    cout << "Record not found.\n";
```

```
}
```

```
}
```

```
// Function to display the menu
```

```
void showMenu() {  
    cout << "\n===== Student Record System =====\n";  
    cout << "1. Create \n";  
    cout << "2. Search \n";  
    cout << "3. Delete \n";  
    cout << "4. Exit\n";  
    cout << "Enter your choice: ";  
}
```

```
// Main function
```

```
int main() {  
    int choice;  
  
    do {  
        showMenu();  
        cin >> choice;  
  
        switch (choice) {  
            case 1:  
                createRecord();  
                break;  
            case 2:  
                searchRecord();  
                break;  
            case 3:  
                deleteRecord();  
                break;  
            case 4:  
                cout << "Exiting the program...\n";  
                break;  
            default:
```

```
        cout << "Invalid choice. Please try again.\n";  
    }  
  
} while (choice != 4);  
  
return 0;  
}
```