**Code**

#include <iostream>

#include <fstream>

using namespace std;

class Record {

int rollno;

string name;

int division;

string address;

public:

Record();

int getRollno();

void getData();

void putData();

};

Record::Record() {

rollno = 0;

name = ' ';

address = ' ';

division = 0;

}

int Record::getRollno() {

return (rollno);

}

void Record::getData() {

cout << "\nEnter Details: ";

cout << "\nRoll no: ";

cin >> rollno;

cout << "Name: ";

cin >> name;

cout << "Division Code: ";

cin >> division;

cout << "Address: ";

cin >> address;

}

void Record::putData() {

cout << "\nRoll No.: ";

cout << rollno;

cout << "\t\tName: ";

cout << name;

cout << "\nDivision Code: ";

cout << division;

cout << "\tAddress: ";

cout << address;

}

class File {

ifstream fin;

ofstream fout;

fstream fs;

public:

void insert();

void display();

void search(int);

int Delete(int);

int edit(int);

};

void File::insert() {

Record r;

r.getData();

fout.open("StudentDB", ios::ate | ios::app);

fout.write((char \*)&r, sizeof(r));

fout.close();

}

void File::display() {

Record r;

fin.open("StudentDB");

fin.seekg(0, ios::beg);

while (fin.read((char \*)&r, sizeof(r)))

r.putData();

fin.close();

}

void File::search(int rollno) {

Record r;

int flag = 0;

fin.open("StudentDB");

fin.seekg(0, ios::beg);

while (fin.read((char \*)&r, sizeof(r))) {

if (r.getRollno() == rollno) {

flag = 1;

break;

}

}

fin.close();

if (flag == 1) {

cout << "\nRecord Found:";

r.putData();

}

else

cout << "\nRecord not Found ";

}

int File::Delete(int rollno) {

Record r;

int flag = 0;

fin.open("StudentDB");

fout.open("Temp", ios::ate | ios::app);

fin.seekg(0, ios::beg);

while (fin.read((char \*)&r, sizeof(r))) {

if (r.getRollno() == rollno) {

flag = 1;

}

else {

fout.write((char \*)&r, sizeof(r));

}

}

fin.close();

fout.close();

remove("StudentDB");

rename("Temp", "StudentDB");

return (flag);

}

int File::edit(int rollno) {

Record r;

int flag = 0;

fs.open("StudentDB");

fs.seekg(0, ios::beg);

while (fs.read((char \*)&r, sizeof(r))) {

if (r.getRollno() == rollno) {

flag = 1;

cout << "\nEnter New Details: ";

r.getData();

fs.seekp((int)fs.tellg() - sizeof(r), ios::beg);

fs.write((char \*)&r, sizeof(r));

}

}

fs.close();

return (flag);

}

int main() {

File f;

int ch, n, i, flag = 0;

do {

cout << "\n\n\t-----M E N U-----";

cout << "\n\n1. Build A Master Table";

cout << "\n2. List A Table";

cout << "\n3. Insert a New Entry";

cout << "\n4. Delete Old Entry";

cout << "\n5. Edit an Entry";

cout << "\n6. Search for a Record";

cout << "\n7. Quit";

cout << "\nEnter your Choice: ";

cin >> ch;

switch (ch) {

case 1:

if (flag == 0) {

cout << "\nEnter No of Records to insert : ";

cin >> n;

for (i = 0; i < n; i++) {

f.insert();

}

flag = 1;

}

else {

cout << "\nSorry.. Table is Already build... \n If want to add record please select Insert a New Entry in option.....";

}

break;

case 2:

f.display();

break;

case 3:

f.insert();

break;

case 4:

cout << "\nEnter Roll No of Student Whose Record is to be Deleted: ";

cin >> n;

i = f.Delete(n);

if (i == 1)

cout << "\nRecord Deleted Successfully";

else

cout << "\nRecord not Found";

break;

case 5:

cout << "\nEnter Roll No of Student Whose Record is to be Edit: ";

cin >> n;

i = f.edit(n);

if (i == 1)

cout << "\nRecord Modified Successfully";

else

cout << "\nRecord not Found";

break;

case 6:

cout << "\nEnter Roll No of Student Whose Record is to be Searched: ";

cin >> n;

f.search(n);

break;

case 7:

break;

default:

cout << "\nEnter Valid Choice.....";

}

} while (ch != 7);

return (0);

}