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**OBJECT ORIENTED PROGRAMMING LABORATORY**  
**LAB ASSIGNMENT 4**

Problem Statement :

Write a C++ program that creates an output file, writes information to it, closes the file and open it again as an input file and read the information from the file.

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**Main Program**

```
#include <iostream>
#include <fstream>
using namespace std;

class Student {
private:
    string name;
    int rollno;

public:
    void add_info() {
        fstream fs;
        fs.open("sample.txt", ios::app);
        if (!fs) {
            cout << "File creation failed\n";
        } else {
            cout << "Enter name of student: ";
            cin.ignore();
            getline(cin, name);
            cout << "Enter roll no: ";
            cin >> rollno;
            fs << name << " " << rollno << "\n";
            fs.close(); // Close file
        }
    }

    void display() {
        fstream fs;
        fs.open("sample.txt", ios::in); // Open file in input mode
        if (!fs) {
            cout << "No such file\n";
        } else {
            while (fs >> name >> rollno) { // Read name and roll no
                cout << name << " " << rollno << "\n";
            }
            fs.close();
        }
    }
}
```

```

};

int main() {
    Student s1;
    int ch;

    do {
        cout << "\nStudent database:";
        cout << "\nMenu";
        cout << "\n1. Add student Information";
        cout << "\n2. Display student Information";
        cout << "\n3. Exit";
        cout << "\nEnter your choice: ";
        cin >> ch;

        switch (ch) {
            case 1:
                s1.add_info(); // Add the info
                break;
            case 2:
                s1.display(); // Display the info
                break;
            case 3:
                cout << "Exit!!\n";
                break;
            default:
                cout << "Invalid choice! Please try again.\n";
        }
    } while (ch != 3);

    return 0;
}

```

\*\*\*\*\***OUTPUT**\*\*\*\*\*

```

Student database:
Menu
1. Add student Information
2. Display student Information
3. Exit
Enter your choice: 1

```

Enter name of student: Anushka Patil

Enter roll no: 25

Student database:

Menu

1. Add student Information
2. Display student Information
3. Exit

Enter your choice:2

Anushka Patil 25

Student database:

Menu

1. Add student Information
2. Display student Information
3. Exit

Enter your choice: 3

Exit!!