L8 specification.md 2024-02-18

# Lab 8 - File I/O

1. C program to read name and marks of n number of students and store them in a file.

• Console output:

```
Enter number of students: 3
For student 1
Enter name: Lisa
Enter marks: 75
For student 2
Enter name: Jean
Enter marks: 43
For student 3
Enter name: Evan
Enter marks: 82
```

• File output:

```
Name: Lisa
Marks: 75

Name: Jean
Marks: 43

Name: Evan
Marks: 82
```

- 2. C program to read name and marks of n number of students from and store them in a file. If the file previously exits, add the information to the file.
- Console output:

```
Enter number of students: 2
For student 1
Enter name: Noah
Enter marks: 56
For student 2
Enter name: Bart
Enter marks: 79
```

• File output:

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```
Name: Lisa
Marks: 75

Name: Jean
Marks: 43

Name: Evan
Marks: 82

Name: Noah
Marks: 56

Name: Bart
Marks: 79
```

## 3. C program to populate a structure with data from a file

#### • Structure

```
typedef struct _Student
{
    char name[50];
    int id;
    int year;
    float gpa;
} Student;
```

#### • File data

```
Melvin
123456
2
2.8
```

### • Console output:

```
Student name: Melvin
Student ID: 123456
Year: 2
GPA: 2.8
```