

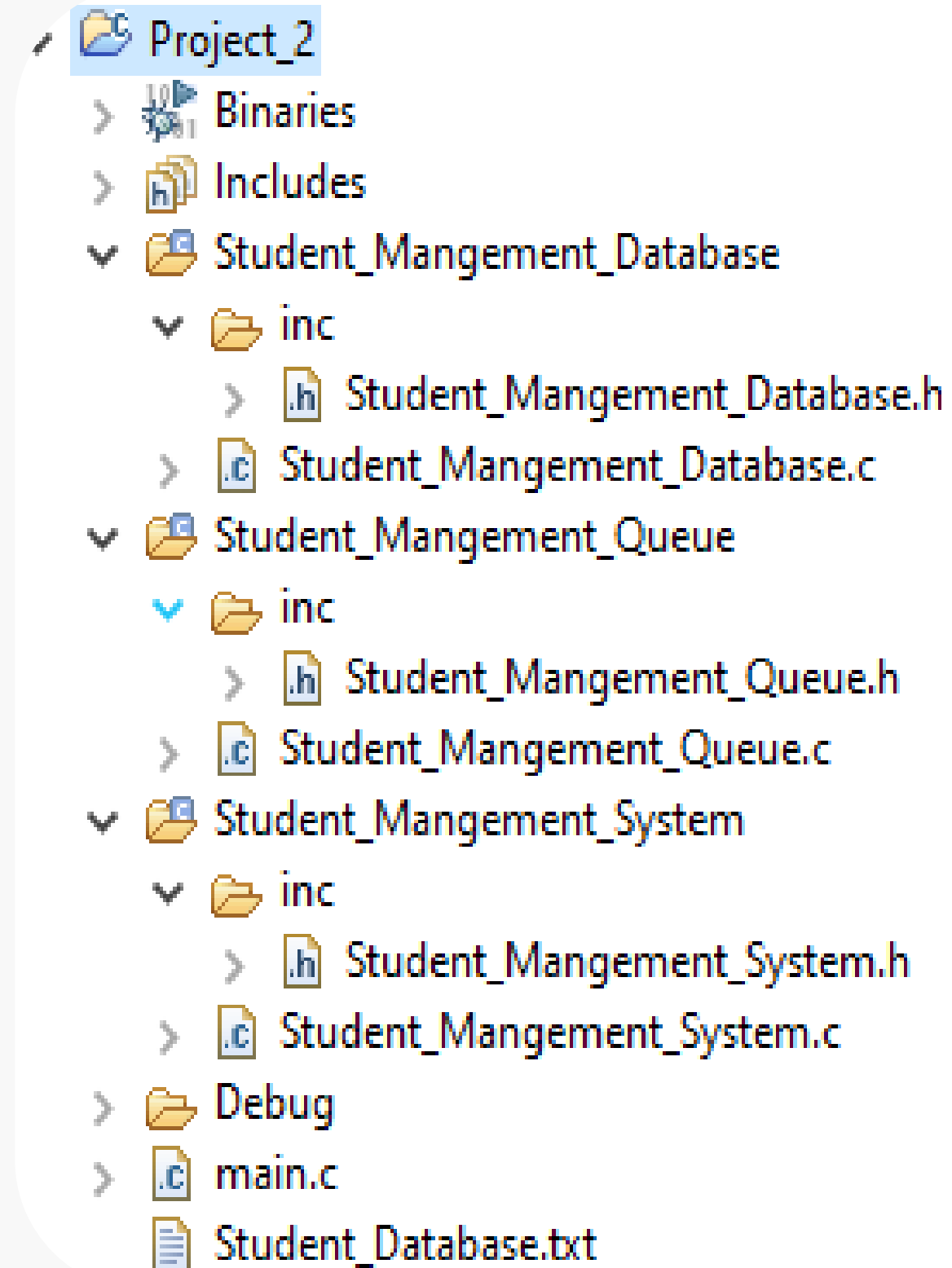
# STUDENT MANAGEMENT SYSTEM

**PRESENTED TO**  
Guirguis Hedia Henan

**PRESENTED BY**  
Keroles Shenouda

1-8-2023

# File Structure



# Features

1

Add Student Manually.

5

Find The Total Number of Students

2

Add Students from Text file

6

Delete the Student Details By Roll Number

3

Find The Student Details By the Roll Number

7

Update the Student Details By Roll Number

4

Find The Student Details By the First Name

8

Show all Information

5

Find The Student Details By the Course ID

# 1 Add Student Manually

- Asking the User to Enter The ID ,first Name ,Last Name ,GPA and Courses IDs
- Check if the Roll Number within Range [1~2000]
- Check if the First Name and The Last Name with no Error in Syntax
- Check if GPA with no Error in Syntax
- Check if the Roll Number is Used



```
-----
Choose The Task that you want to perform :
1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit
-----
Enter Your Choice to Perform the Task:1
-----
Add The Students Details :
-----
Enter The Roll Number [1 ~ 2000]:5
Enter The First Name of the Student [Max 20 Char]:Ephraim
Enter The Last Name of the Student [Max 20 Char]:Hedia
Enter The GPA you obtained [0 ~ 5]:4
Course 1 ID :1
Course 2 ID :2
Course 3 ID :3
Course 4 ID :4
Course 5 ID :5
[INFO] Student Details is added Successfully
-----
[INFO] The Total Number of Student is 1
[INFO] You Can add up to 50 Student
[INFO] You Can add 49 more Student
-----
```

# Add Student Manually

- Asking the User to Enter The ID ,first Name ,Last Name ,GPA and Courses IDs



Choose The Task that you want to perform :

1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit

Enter Your Choice to Perform the Task:1

Add The Students Details :

Enter The Roll Number [1 ~ 2000]:2200

You Enter Wrong Syntax

Enter The Roll Number [1 ~ 2000]:200

Enter The First Name of the Student [Max 20 Char]:Ephraim

Enter The Last Name of the Student [Max 20 Char]:Hedia

Enter The GPA you obtained [0 ~ 5]:4.5

Course 1 ID :1

Course 2 ID :2

Course 3 ID :3

Course 4 ID :4

Course 5 ID :5

[INFO] Student Details is added Successfully

# Add Student Manually

- Check if the Roll Number within Range [1~2000]

```
-----
Choose The Task that you want to perform :
1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit
-----
```

```
Enter Your Choice to Perform the Task:1
-----
```

```
Add The Students Details :
-----
```

```
Enter The Roll Number [1 ~ 2000]:20
```

```
Enter The First Name of the Student [Max 20 Char]:Ephraim Hedia Henan And e
You Enter Wrong Syntax
```

```
Enter The First Name of the Student [Max 20 Char]:Ephraim
```

```
Enter The Last Name of the Student [Max 20 Char]:Ephraim Hedia Henan And e
You Enter Wrong Syntax
```

```
Enter The Last Name of the Student [Max 20 Char]:Hedia
```

```
Enter The GPA you obtained [0 ~ 5]:4.5
```

```
Course 1 ID :1
```

```
Course 2 ID :2
```

```
Course 3 ID :3
```

```
Course 4 ID :4
```

```
Course 5 ID :5
```

```
[INFO] Student Details is added Successfully
-----
```

# Add Student Manually

- Check if the First Name and The Last Name with no Error in Syntax



# Add Student Manually

- Check if GPA with no Error in Syntax

```
-----
Choose The Task that you want to perform :
1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit
-----
Enter Your Choice to Perform the Task:1
-----
Add The Students Details :
-----
Enter The Roll Number [1 ~ 2000]:20
Enter The First Name of the Student [Max 20 Char]:Ephraim
Enter The Last Name of the Student [Max 20 Char]:Hedia
Enter The GPA you obtained [0 ~ 5]:6
You Enter Wrong Syntax
Enter The GPA you obtained [0 ~ 5]:-1
You Enter Wrong Syntax
Enter The GPA you obtained [0 ~ 5]:3.5
Course 1 ID :1
Course 2 ID :2
Course 3 ID :3
Course 4 ID :4
Course 5 ID :5
[INFO] Student Details is added Successfully
-----
```





## 2 Add Students from Text file

- Add The Students from Text File and if Adding Finish Correctly print Total Number of Students
- Check if NO Repeated Roll Number
- Check if the File NOT Open Correctly
- Check if The file Format not Correct



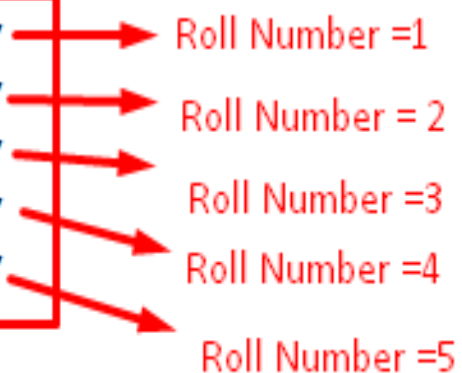
```
-----  
Choose The Task that you want to perform :  
1. Add Student Details Manually  
2. Add Student Details From Text File  
3. Find The Student Details By the Roll Number  
4. Find The Student Details By the First Name  
5. Find The Student Details By the Course ID  
6. Find The Total Number of Students  
7. Delete the Student Details By Roll Number  
8. Update the Student Details By Roll Number  
9. Show all Information  
10. To Exit  
-----
```

```
Enter Your Choice to Perform the Task:2
```

```
[INFO] File Reading Done
```

NO Repeated Roll Numbers

```
-----  
[INFO] Roll Number 1 is Added Successfully  
[INFO] Roll Number 2 is Added Successfully  
[INFO] Roll Number 3 is Added Successfully  
[INFO] Roll Number 4 is Added Successfully  
[INFO] Roll Number 5 is Added Successfully  
-----
```



```
[INFO] The Total Number of Student is 5
```

```
[INFO] You Can add up to 50 Student
```

```
[INFO] You Can add 45 more Student
```

# Add Students from Text file

- Add The Students from Text File and if Adding Finish Correctly print Total Number of Students

Choose The Task that you want to perform :

1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit

Enter Your Choice to Perform the Task:2

[INFO] File Reading Done

[INFO] Roll Number 1 is Added Successfully

[INFO] Roll Number 2 is Added Successfully

[INFO] Roll Number 3 is Added Successfully

[INFO] Roll Number 4 is Added Successfully

[INFO] Roll Number 5 is Added Successfully

[ERROR] Roll Number 5 is Already Taken

→ Repeated Roll Number

[INFO] The Total Number of Student is 5

[INFO] You Can add up to 50 Student

[INFO] You Can add 45 more Student

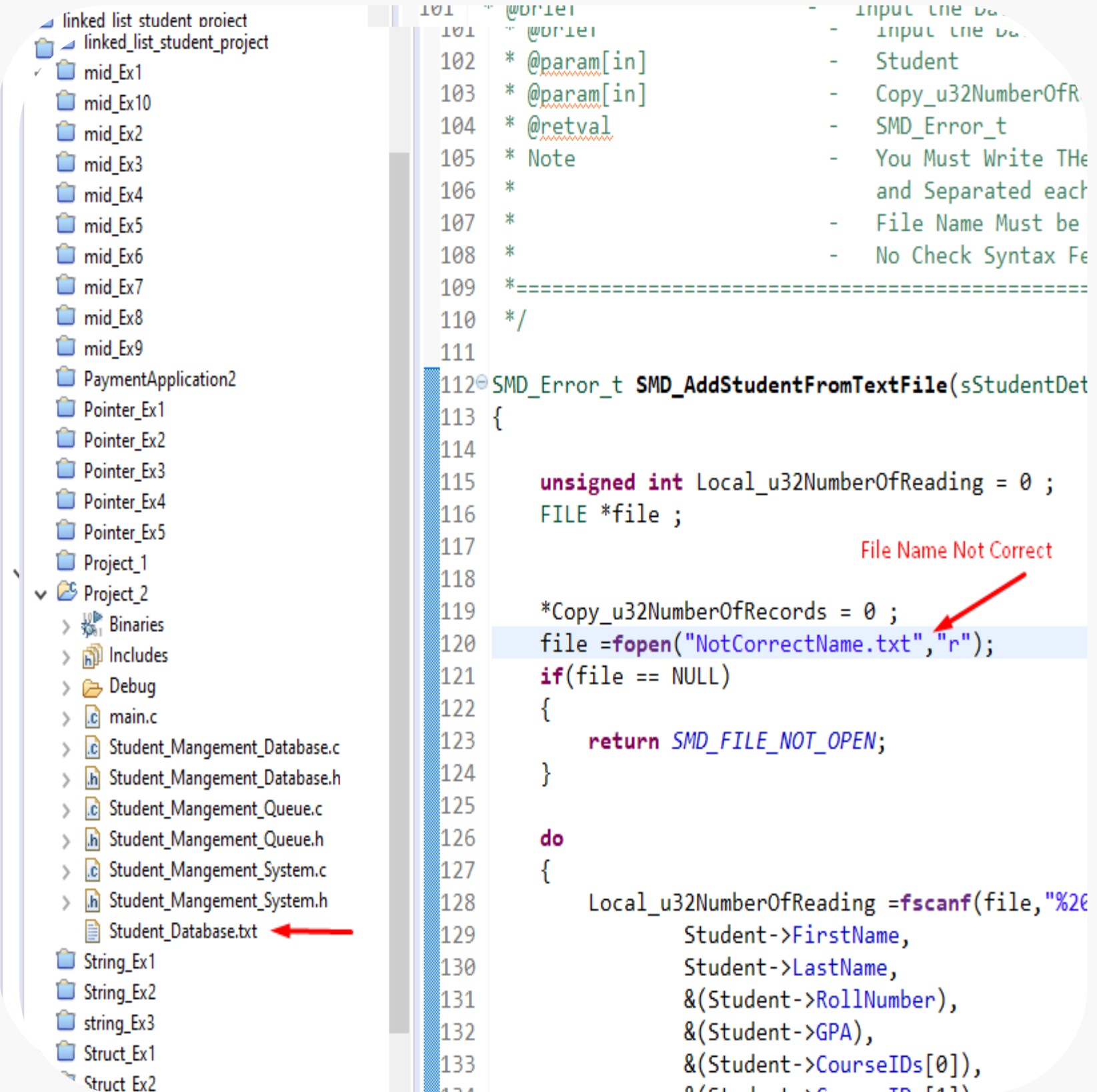
Total Students Number is 5 Only

# Add Students from Text file

- Check if NO Repeated Roll Number

[Back to Agenda](#)





```
101  * @brief - Input the data
102  * @param[in] - Student
103  * @param[in] - Copy_u32NumberOfRecords
104  * @retval - SMD_Error_t
105  * Note - You Must Write The File Name and Separated each line with a comma
106  * - File Name Must be Correct
107  * - No Check Syntax For Now
108  *
109  *=====
110  */
111
112 SMD_Error_t SMD_AddStudentFromTextFile(sStudentDet
113 {
114
115     unsigned int Local_u32NumberOfReading = 0 ;
116     FILE *file ;
117
118     // File Name Not Correct
119     *Copy_u32NumberOfRecords = 0 ;
120     file = fopen("NotCorrectName.txt", "r");
121     if(file == NULL)
122     {
123         return SMD_FILE_NOT_OPEN;
124     }
125
126     do
127     {
128         Local_u32NumberOfReading = fscanf(file, "%20s%20s%20s%20s%20s",
129             Student->FirstName,
130             Student->LastName,
131             &(Student->RollNumber),
132             &(Student->GPA),
133             &(Student->CourseIDs[0]),
134             &(Student->CourseIDs[1])
135         );
136     } while (Local_u32NumberOfReading > 0);
137
138     return SMD_SUCCESS;
139 }
```

# Add Students from Text file

- Check if the File NOT Open Correctly

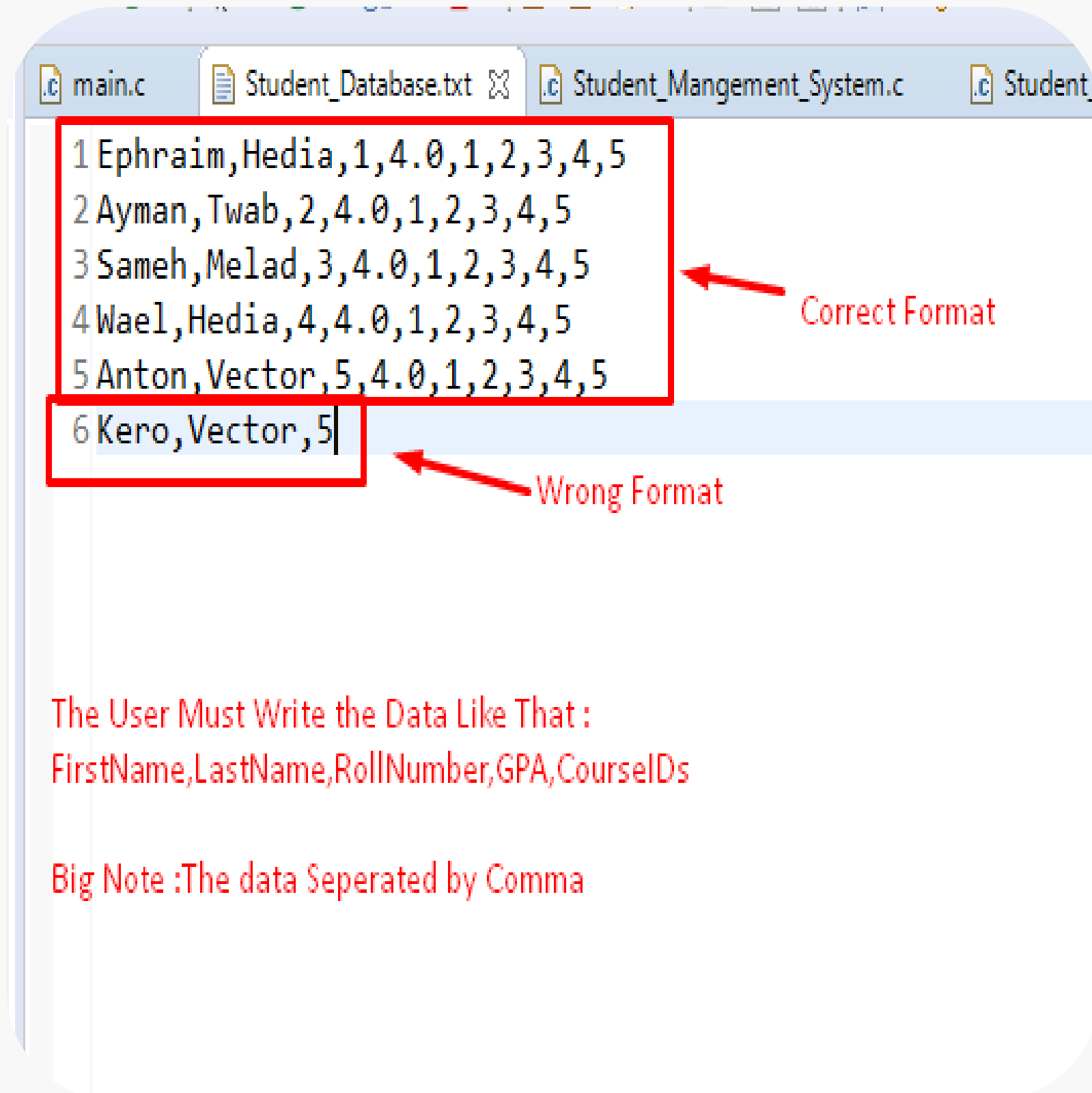
# Add Students from Text file

- Check if the File NOT Open Correctly

```
linked list student project 101 @briet Input the da

-----
Choose The Task that you want to perform :
1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit                                     File Not Open Because File Name Not
                                              correct
-----
Enter Your Choice to Perform the Task:2
[ERROR] File Not OPEN
-----
-----
[INFO] The Total Number of Student is 0
[INFO] You Can add up to 50 Student
[INFO] You Can add 50 more Student
```





```
1 Ephraim,Hedia,1,4.0,1,2,3,4,5
2 Ayman,Twab,2,4.0,1,2,3,4,5
3 Sameh,Melad,3,4.0,1,2,3,4,5
4 Wael,Hedia,4,4.0,1,2,3,4,5
5 Anton,Vector,5,4.0,1,2,3,4,5
6 Kero,Vector,5|
```

The User Must Write the Data Like That :  
FirstName,LastName,RollNumber,GPA,CourseIDs

Big Note :The data Seperated by Comma

# Add Students from Text file

- Check if The file Format not Correct



Choose The Task that you want to perform :

1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit

Enter Your Choice to Perform the Task:2

[ERROR] Wrong File Format , Please Make Sure You Write a Correct Foramt

-----  
-----  
OUTPUT if You Write the data with  
Wrong Format

[INFO] The Total Number of Student is 0

[INFO] You Can add up to 50 Student

[INFO] You Can add 50 more Student

# Add Students from Text file

- Check if The file Format not Correct

# 3 Find The Student Details By the Roll Number



Choose The Task that you want to perform :

1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit

Enter Your Choice to Perform the Task:2

[INFO] File Reading Done

[INFO] Roll Number 1 is Added Successfully  
[INFO] Roll Number 2 is Added Successfully  
[INFO] Roll Number 3 is Added Successfully  
[INFO] Roll Number 4 is Added Successfully  
[INFO] Roll Number 5 is Added Successfully

[INFO] The Total Number of Student is 5

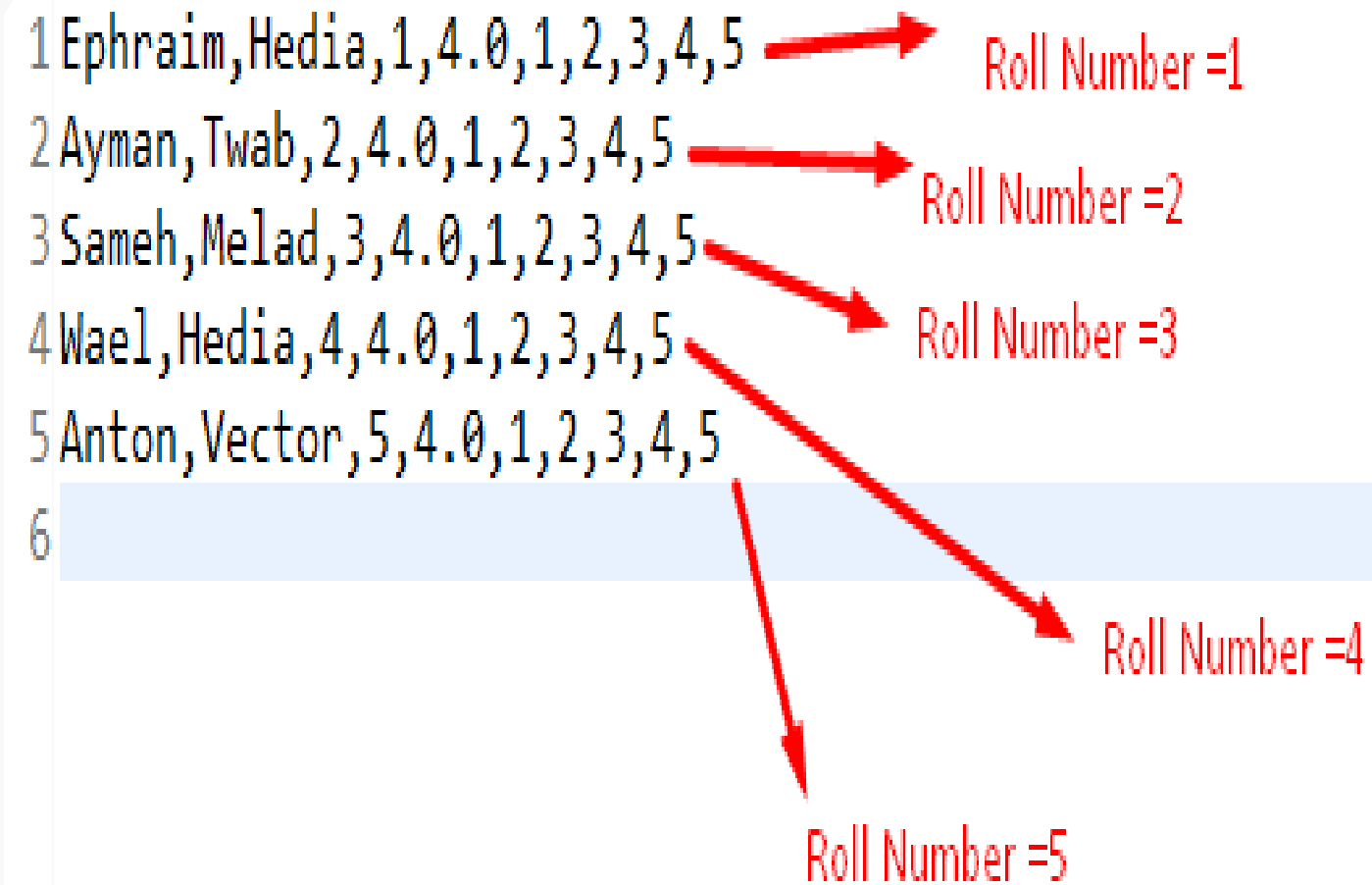
[INFO] You Can add up to 50 Student

[INFO] You Can add 45 more Student

First We Add the Students  
in the Text File into the  
Database  
to Can Use Them

# Find The Student Details By the Roll Number

- We add First the Students in the Text file into the Database to Use them in Our Check



1 Ephraim,Hedia,1,4.0,1,2,3,4,5 → Roll Number =1  
2 Ayman,Twab,2,4.0,1,2,3,4,5 → Roll Number =2  
3 Sameh,Melad,3,4.0,1,2,3,4,5 → Roll Number =3  
4 Wael,Hedia,4,4.0,1,2,3,4,5 → Roll Number =4  
5 Anton,Vector,5,4.0,1,2,3,4,5 → Roll Number =5  
6

# Find The Student Details By the Roll Number

- [NOTE] Students Information in the Text File

```
Choose The Task that you want to perform :
1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit
```

```
Enter Your Choice to Perform the Task:3
Enter the Roll Number of the Student :1
The Student Details are :
Student First Name : Ephraim
Student Last Name : Hedia
Student Roll Number : 1
Student GPA : 4.000000
The Course ID are 1
The Course ID are 2
The Course ID are 3
The Course ID are 4
The Course ID are 5
```

# Find The Student Details By the Roll Number

The Output of the Searching



# Find The Student Details By the First Name





Choose The Task that you want to perform :

1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit

Enter Your Choice to Perform the Task:2

[INFO] File Reading Done

[INFO] Roll Number 1 is Added Successfully  
[INFO] Roll Number 2 is Added Successfully  
[INFO] Roll Number 3 is Added Successfully  
[INFO] Roll Number 4 is Added Successfully  
[INFO] Roll Number 5 is Added Successfully

[INFO] The Total Number of Student is 5

[INFO] You Can add up to 50 Student

[INFO] You Can add 45 more Student

First We Add the Students  
in the Text File into the  
Database  
to Can Use Them

# Find The Student Details By the First Name

We add First the Students in the Text file into the Database to Use them in Our Check



main.c Student\_Database.txt Student\_Mangement\_System.c Studen\_

```
1 Ephraim,Hedia,1,4.0,1,2,3,4,5
2 Ayman,Twab,2,4.0,1,2,3,4,5
3 Sameh,Melad,3,4.0,1,2,3,4,5
4 Wael,Hedia,4,4.0,1,2,3,4,5
5 Anton,Vector,5,4.0,1,2,3,4,5
6
```

First Name = Ephraim  
First Name = Ayman  
First Name = Sameh  
First Name = Wael  
First Name = Anton

# Find The Student Details By the First Name

[NOTE] Students Information in the Text File

Choose The Task that you want to perform :

1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit

Enter Your Choice to Perform the Task:4

Enter the First Name of the Student :Ephraim

The Student Details are :

Student No. 1 :

Student First Name : Ephraim

Student Last Name : Hedia

Student Roll Number : 1

Student GPA : 4.000000

The Course ID are 1

The Course ID are 2

The Course ID are 3

The Course ID are 4

The Course ID are 5

# Find The Student Details By the First Name

The Output of the Searching



```
-----  
Choose The Task that you want to perform :  
1. Add Student Details Manually  
2. Add Student Details From Text File  
3. Find The Student Details By the Roll Number  
4. Find The Student Details By the First Name  
5. Find The Student Details By the Course ID  
6. Find The Total Number of Students  
7. Delete the Student Details By Roll Number  
8. Update the Student Details By Roll Number  
9. Show all Information  
10. To Exit  
-----
```

```
Enter Your Choice to Perform the Task:4  
Enter the First Name of the Student :Kero  
[ERROR] First Name Kero Not Found
```

# Find The Student Details By the First Name

The Output of the Searching [If the Name Not Found in the Database]

# 5 Find The Student Details By the Course ID

- OUTPUT if the Course ID is Exist in the Database
- OUTPUT if the Course ID not Exist in the Database



```
-----
Choose The Task that you want to perform :
1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit
-----
```

```
Enter Your Choice to Perform the Task:2
[INFO] File Reading Done
```

```
-----
[INFO] Roll Number 1 is Added Successfully
[INFO] Roll Number 2 is Added Successfully
[INFO] Roll Number 3 is Added Successfully
[INFO] Roll Number 4 is Added Successfully
[INFO] Roll Number 5 is Added Successfully
-----
```

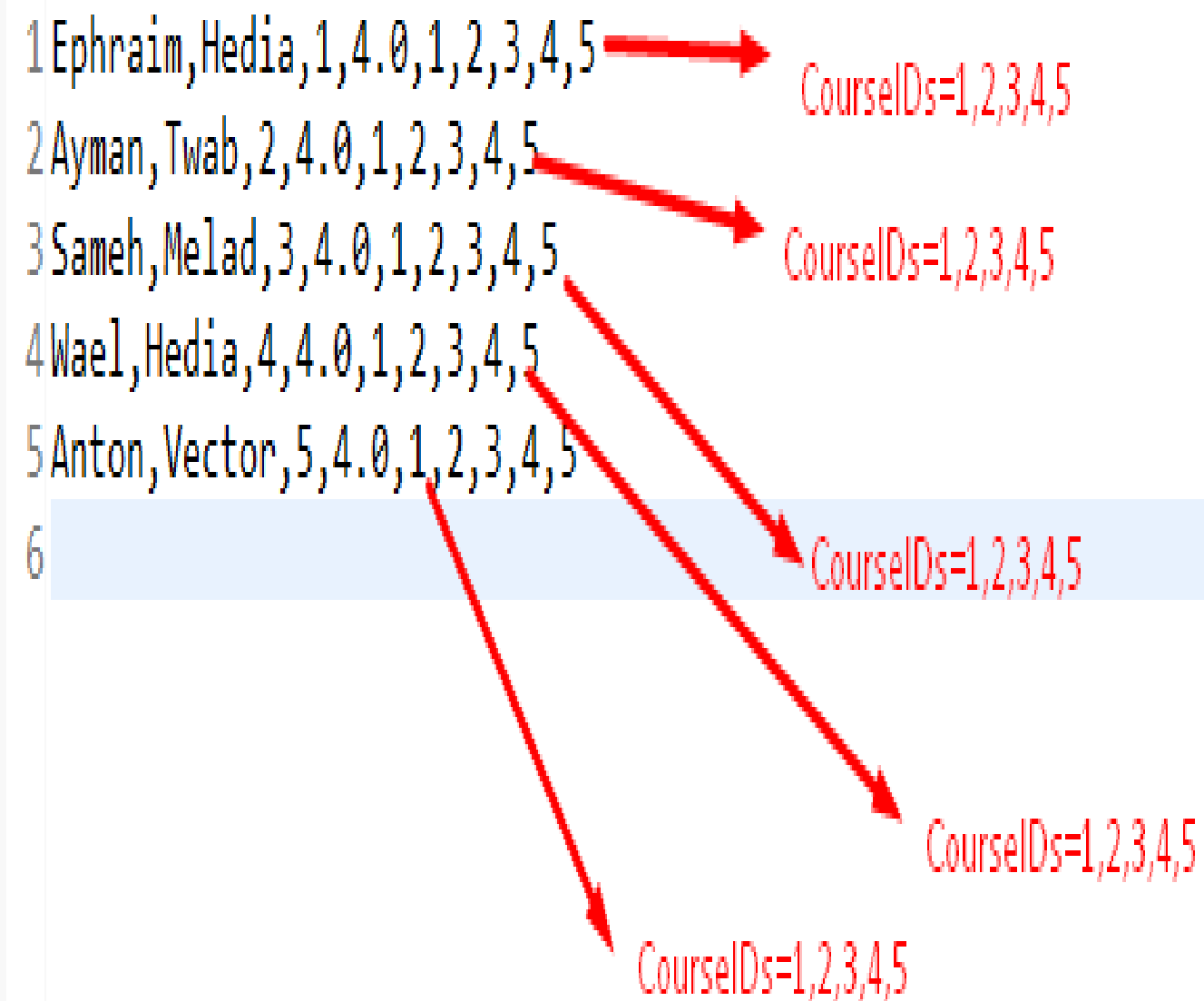
```
-----
[INFO] The Total Number of Student is 5
[INFO] You Can add up to 50 Student
[INFO] You Can add 45 more Student
-----
```

First We Add the Students  
in the Text File into the  
Database  
to Can Use Them

# Find The Student Details By the Course ID

We add First the Students in the Text file into the Database to Use them in Our Check





```
1 Ephraim,Hedia,1,4.0,1,2,3,4,5
2 Ayman,Twab,2,4.0,1,2,3,4,5
3 Sameh,Melad,3,4.0,1,2,3,4,5
4 Wael,Hedia,4,4.0,1,2,3,4,5
5 Anton,Vector,5,4.0,1,2,3,4,5
6
```

CourseIDs=1,2,3,4,5

CourseIDs=1,2,3,4,5

CourseIDs=1,2,3,4,5

CourseIDs=1,2,3,4,5

CourseIDs=1,2,3,4,5

# Find The Student Details By the Course ID

[NOTE] Students Information in the Text File

Enter Your Choice to Perform the Task:5

Enter the Course ID :1

The Student Details are :

Student No. 1 :

Student First Name : Ephraim

Student Last Name : Hedia

Student Roll Number : 1

Student GPA : 4.000000

The Course ID are 1

The Course ID are 2

The Course ID are 3

The Course ID are 4

The Course ID are 5

-----  
Student No. 2 :

Student First Name : Ayman

Student Last Name : Twab

Student Roll Number : 2

Student GPA : 4.000000

The Course ID are 1

The Course ID are 2

The Course ID are 3

The Course ID are 4

The Course ID are 5

-----  
Student No. 3 :

Student First Name : Sameh

Student Last Name : Melad

Student Roll Number : 3

Student GPA : 4.000000

The Course ID are 1

The Course ID are 2

The Course ID are 3

The Course ID are 4

The Course ID are 5

-----  
Student No. 4 :

Student First Name : Wael

Student Last Name : Hedia

Student Roll Number : 4

Student GPA : 4.000000

The Course ID are 1

The Course ID are 2

Activate  
Go to Set

# Find The Student Details By the Course ID

The Output of the Searching if The Course ID Found

[Back to Agenda](#)



Choose The Task that you want to perform :

1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit

Enter Your Choice to Perform the Task:5

Enter the Course ID :10

[ERROR] Course ID NOT FOUND

# Find The Student Details By the Course ID

The Output of the Searching if The Course ID Not Found

# 6 Find The Total Number of Students

- OUTPUT At Beginning Before adding any Student
- OUTPUT After Adding The Students in the Text File into the Database



```
Project_2.exe [C/C++ Application] D:\Learn_in_Depth\C_Programming\Project_2\Debug\Project_2.\\
```

```
Welcome to the Student Management System
```

```
-----  
[INFO] The Database Initialize Successfully  
-----
```

```
-----  
Choose The Task that you want to perform :
```

1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit

```
-----  
Enter Your Choice to Perform the Task:6
```

```
[ERROR] The Database is EMPTY , Try to Enter Data
```

# Find The Total Number of Students

OUTPUT At Beginning Before adding any Student



Choose The Task that you want to perform :

1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit

```
Enter Your Choice to Perform the Task:6
[INFO] The Total Number of Student is 5
[INFO] You Can add up to 50 Student
[INFO] You Can add 45 more Student
```

# Find The Total Number of Students

OUTPUT After Adding The Student in the Text File



# 7 Delete the Student Details By Roll Number

- OUTPUT if The Student Roll Number Not Found
- OUTPUT if The Student is Exist



Choose The Task that you want to perform :

1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit

Enter Your Choice to Perform the Task:7

Enter The Roll Number which you want to Delete :200

[ERROR] The ROLL Number 200 NOT FOUND

# Delete the Student Details By Roll Number

OUTPUT if The Student Roll Number  
Not Found



```
-----
Choose The Task that you want to perform :
1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit
-----
```

```
Enter Your Choice to Perform the Task:9
```

```
-----
Student First Name : Ephraim
Student Last Name : Hedia
Student Roll Number : 1
Student GPA : 3.500000
The Course ID are 1
The Course ID are 2
The Course ID are 3
The Course ID are 4
The Course ID are 5
-----
```

```
-----
Student First Name : Anton
Student Last Name : Vector
Student Roll Number : 2
Student GPA : 3.700000
The Course ID are 1
The Course ID are 2
The Course ID are 3
The Course ID are 4
The Course ID are 5
-----
```

# Delete the Student Details By Roll Number

The Database Before Delete any Student



Choose The Task that you want to perform :

1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit

Enter Your Choice to Perform the Task:7

Enter The Roll Number which you want to Delete :1

[INFO] The Roll Number is removed Successfully

# Delete the Student Details By Roll Number

Delete the Student of Roll Number =1



Choose The Task that you want to perform :

1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit

Enter Your Choice to Perform the Task:9

Student First Name : Anton  
Student Last Name : Vector  
Student Roll Number : 2  
Student GPA : 3.700000  
The Course ID are 1  
The Course ID are 2  
The Course ID are 3  
The Course ID are 4  
The Course ID are 5

[INFO] Student Details is Printed Successfully

# Delete the Student Details By Roll Number

Database After Deleting The Student

# 8 Update the Student Details By Roll Number



Choose The Task that you want to perform :

1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit

Enter Your Choice to Perform the Task:8

Enter the Roll Number to update the entry :2

Which of the Following Data You Want to Change :

1. First Name
2. Last Name
3. Roll Number
4. GPA
5. Courses

4

Enter The New GPA :5

[[INFO] Update Successfully

# Update the Student Details By Roll Number

Updating the GPA of Student with  
Roll Number =2  
Just Prove of Concept

```
Choose The Task that you want to perform :
1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit
```

```
Enter Your Choice to Perform the Task:9
```

```
Student First Name : Ephraim
Student Last Name : Hedia
Student Roll Number : 1
Student GPA : 3.500000
The Course ID are 1
The Course ID are 2
The Course ID are 3
The Course ID are 4
The Course ID are 5
```

```
Student First Name : Anton
Student Last Name : Vector
Student Roll Number : 2
```

```
Student GPA : 5.000000
```

GPA Updating Successfully

```
The Course ID are 1
The Course ID are 2
The Course ID are 3
The Course ID are 4
The Course ID are 5
```

```
[INFO] Student Details is Printed Successfully
```

# Update the Student Details By Roll Number

Database After Updating

[Back to Agenda](#)





# 9 Show all Information

- Show All information if Database Not Empty
- Show All information if IF Database Not Empty



```
-----  
Choose The Task that you want to perform :  
1. Add Student Details Manually  
2. Add Student Details From Text File  
3. Find The Student Details By the Roll Number  
4. Find The Student Details By the First Name  
5. Find The Student Details By the Course ID  
6. Find The Total Number of Students  
7. Delete the Student Details By Roll Number  
8. Update the Student Details By Roll Number  
9. Show all Information  
10. To Exit  
-----
```

```
Enter Your Choice to Perform the Task:9
```

```
Student First Name : Ephraim  
Student Last Name : Hedia  
Student Roll Number : 1  
Student GPA : 3.500000  
The Course ID are 1  
The Course ID are 2  
The Course ID are 3  
The Course ID are 4  
The Course ID are 5  
-----
```

```
Student First Name : Anton  
Student Last Name : Vector  
Student Roll Number : 2  
Student GPA : 5.000000  
The Course ID are 1  
The Course ID are 2  
The Course ID are 3  
The Course ID are 4  
The Course ID are 5  
-----
```

```
[INFO] Student Details is Printed Successfully
```

# Show all Information

IF Database Not Empty



```
Project_2.exe [C/C++ Application] D:\Learn_in_Depth\C_Programming\Project_2\Debug\Project_2.exe (7/31/23, 16:05:00)
Welcome to the Student Management System
```

```
-----
[INFO] The Database Initialize Successfully
-----
```

```
-----
Choose The Task that you want to perform :
1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit
```

```
Enter Your Choice to Perform the Task:9
[ERROR] The Database is EMPTY , Try to Enter Data
```

```
-----
Choose The Task that you want to perform :
1. Add Student Details Manually
2. Add Student Details From Text File
3. Find The Student Details By the Roll Number
4. Find The Student Details By the First Name
5. Find The Student Details By the Course ID
6. Find The Total Number of Students
7. Delete the Student Details By Roll Number
8. Update the Student Details By Roll Number
9. Show all Information
10. To Exit
```

```
-----
Enter Your Choice to Perform the Task:
```

# Show all Information

IF Database Empty

