

Student Grade Repository is a student management system that allows users to add, remove, modify, and view information about students in a class. The program has several features that can help instructors manage their classes more efficiently.

The program starts with a main menu that allows the user to select the desired task.

```
1- Add a new student          2- Remove a student
3- Edit student's information 4- show top 10 students
5- Students with Most absences 6- Exit

Choose the process you want by typing the order from the list above: █
```

The menu should display the following options:

#Add a student to the class
#Remove a student from the class
#Modify student information
#Show the top 10 students
#Show students with the largest absence
#Exit

If the user selects **option 1**, they can add a new student to the class by entering all the required information, such as the student's ID, name, attendance record, and exam scores. Once all the information is entered, the program adds the student to the class.

```
Choose the process you want by typing the order from the list above: 1
Enter the student's ID: 202181442
Enter the student's name: Mohammad Ahmed
Enter the student's absences:4
Enter the student's first exam grade:43
Enter the student's second exam grade:32
--- The student has been successfully added ---
Type 1 for starting again or 0 for going back:█
```

If the user selects **option 2**, they can remove a student from the class by either their ID or name. If the name is repeated the program will display a table with the students and asks the user to choose. The program shows the full record of the student based on the user's selection and asks for confirmation before deleting the information.

```
Choose the process you want by typing the order from the list above: 2
Type 0, 1 to remove student by id or by name:1
Enter the student name:Suhail Alhawi

-----
| id          | Name          | Absences | Exam1 grade | Exam2 grade | Total marks |
|-----|
| 202181471  | suhail alhawi | 4        | 42          | 50          | 92          |
|-----|
| 202181423  | suhail alhawi | 4        | 42          | 50          | 92          |
|-----|

Select the student by typing his order:2

-----
| id          | Name          | Absences | Exam1 grade | Exam2 grade | Total marks |
|-----|
| 202181423  | suhail alhawi | 4        | 42          | 50          | 92          |
|-----|

Type 1 for removing the student or 0 canceling:1
--- The student has been successfully removed ---
Type 1 for starting again or 0 for going back:█
```

If the user selects **option 3**, they can modify a student's information by retrieving their record by their ID. Once the student's record is displayed, the user can select from a list of options, such as modifying the ID, name, absences, or exam scores.

```
Choose the process you want by typing the order from the list above: 3
Enter the student's ID:202181471

-----
| id          | Name          | Absences | Exam1 grade | Exam2 grade | Total marks |
|-----|
| 202181471  | suhail alhawi | 4        | 42          | 50          | 92          |
|-----|

1- id
2- Name
3- Absences
4- Exam1 grade
5- Exam2 grade

0- * Go back *

Select the field that you want to edit from the list above: 3
Enter the new student's absences: 9
--- The student's information has been successfully updated ---

-----
| id          | Name          | Absences | Exam1 grade | Exam2 grade | Total marks |
|-----|
| 202181471  | suhail alhawi | 9        | 42          | 50          | 92          |
|-----|
```

If the user selects **option 4**, the program shows the top 10 students in the class based on their total marks. This feature is useful for instructors to identify high-performing students and provide them with additional support or recognition.

Choose the process you want by typing the order from the list above: 4

id	Name	Absences	Exam1 grade	Exam2 grade	Total marks
202181471	suhaib alhawi	9	42	50	92
202181442	mohammad ahmed	4	43	32	75
202181478	mohammad omar	2	12	34	46

Type 0 for going back:

If the user selects **option 5**, the program shows the student(s) with the largest number of absences. This feature allows instructors to identify students who may be struggling with attendance and provide them with additional support or resources.

Choose the process you want by typing the order from the list above: 5

id	Name	Absences	Exam1 grade	Exam2 grade	Total marks
202181471	suhaib alhawi	9	42	50	92

Type 0 for going back:

If the user selects **option 6**, the program exits.