

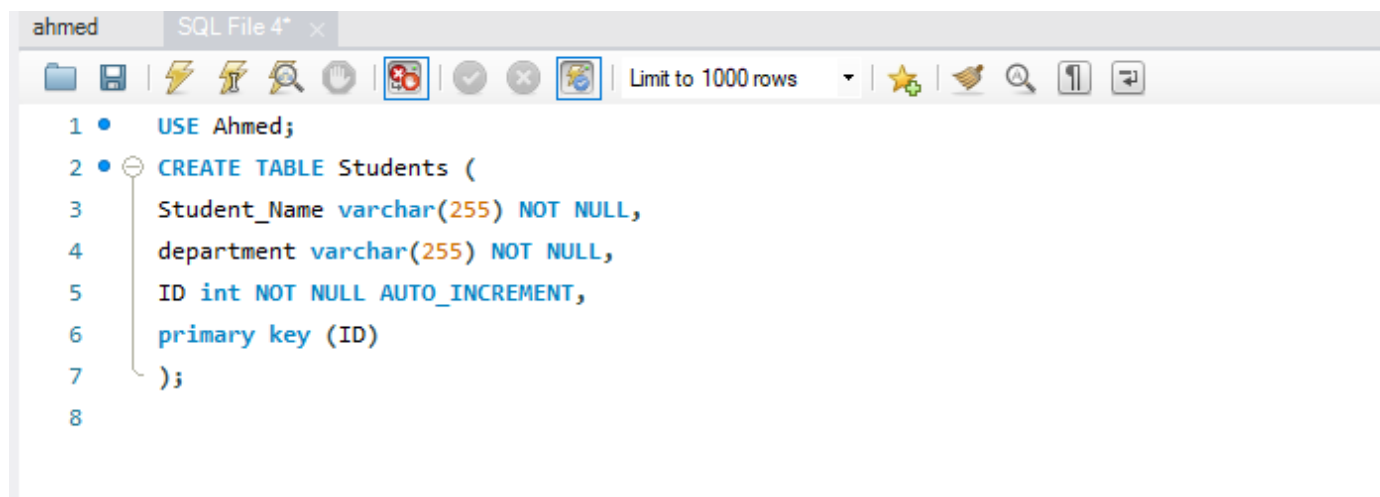
Ahmed Elsayed Ahmed sneed

ID: 4211142 -A4-

S2 "Bonus" (Database)

.....

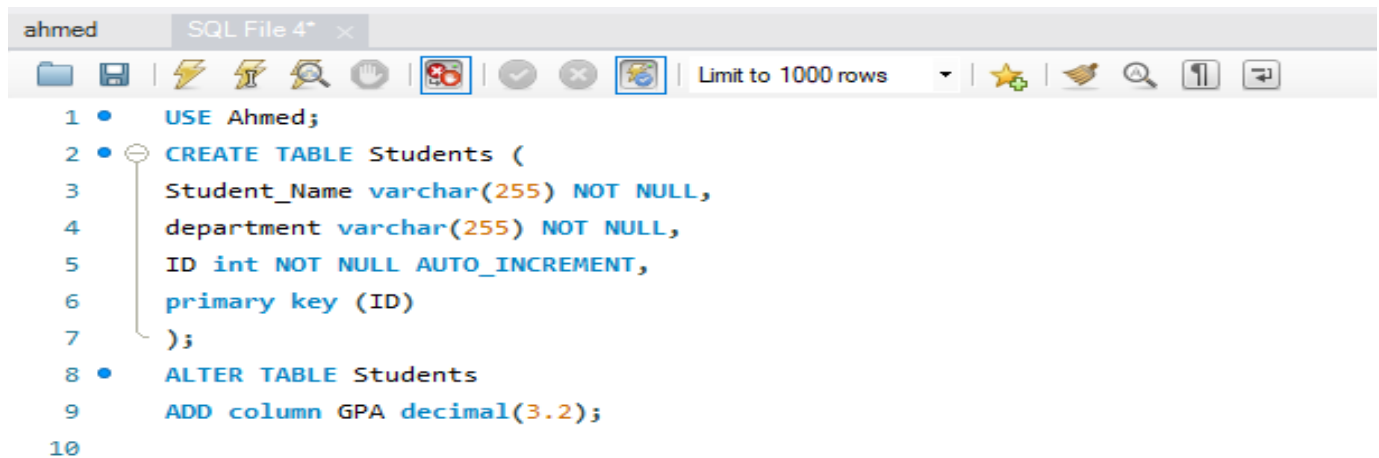
- *create table students with columns (ID (primary key), student_name (NOT NULL), department)*



The screenshot shows a SQL IDE window titled 'ahmed' with a tab 'SQL File 4*'. The toolbar includes icons for file operations, execution, and search. The SQL code is as follows:

```
1 • USE Ahmed;
2 • CREATE TABLE Students (
3     Student_Name varchar(255) NOT NULL,
4     department varchar(255) NOT NULL,
5     ID int NOT NULL AUTO_INCREMENT,
6     primary key (ID)
7 );
8
```

- *Add a column to this table (GPA → DECIMAL (3,2))*



The screenshot shows the same SQL IDE window with the following SQL code:

```
1 • USE Ahmed;
2 • CREATE TABLE Students (
3     Student_Name varchar(255) NOT NULL,
4     department varchar(255) NOT NULL,
5     ID int NOT NULL AUTO_INCREMENT,
6     primary key (ID)
7 );
8 • ALTER TABLE Students
9     ADD column GPA decimal(3.2);
10
```

➤ Add constraint to the column GPA → default value = 2.00

```
10
11 • ALTER TABLE Students
12   ADD CONSTRAINT CHK_GPA CHECK (GPA>=2.00);
```

Output				
Action Output				
#	Time	Action	Message	Duration / Fetch
94	22:56:08	CREATE TABLE Students (Student_Name varchar(255) NOT NULL, department varchar(255) NOT NULL, ID int NOT NULL AUTO_INCREMENT, primary key (ID));	Error Code: 1050. Table 'students' already exists	0.000 sec
95	22:56:08	ALTER TABLE Students ADD column GPA decimal(3,2)	Error Code: 1060. Duplicate column name 'GPA'	0.000 sec
96	22:56:08	ALTER TABLE Students ADD CONSTRAINT CHK_GPA CHECK (GPA>=2.00)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	3.047 sec

➤ Delete the column GPA

ahmed

SQL File 4*

Limit to 1000 rows

1 • USE Ahmed;

2 • CREATE TABLE Students (
3 Student_Name varchar(255) NOT NULL,
4 department varchar(255) NOT NULL,
5 ID int NOT NULL AUTO_INCREMENT,
6 primary key (ID)
7);

8 • ALTER TABLE Students
9 ADD column GPA decimal(3,2);

10

11 • ALTER TABLE Students
12 ADD CONSTRAINT CHK_GPA CHECK (GPA>=2.00);

13

14 • ALTER TABLE Students
15 DROP COLUMN GPA;

Table: students

Columns:
Student_Name varchar(255)
department varchar(255)
ID int AI PK

Output

99 22:58:29 ALTER TABLE Students ADD column GPA decimal(3,2)
100 22:58:29 ALTER TABLE Students ADD CONSTRAINT CHK_GPA CHECK (GPA>=2.00)
101 22:58:29 ALTER TABLE Students DROP COLUMN GPA

Message

Error Code: 1060. Duplicate column name 'GPA'
Error Code: 3822. Duplicate check constraint name 'CHK_GPA'.
0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0

Duration / Fetch

0.016 sec
0.047 sec
1.297 sec

➤ Delete students table

The screenshot shows the MySQL Workbench interface with a SQL script in the editor. The script performs the following actions:

1. `USE Ahmed;`
2. `CREATE TABLE Students (`
3. `Student_Name varchar(255) NOT NULL,`
4. `department varchar(255) NOT NULL,`
5. `ID int NOT NULL AUTO_INCREMENT,`
6. `primary key (ID)`
7. `);`
8. `ALTER TABLE Students`
9. `ADD column GPA decimal(3,2);`
10. (blank line)
11. `ALTER TABLE Students`
12. `ADD CONSTRAINT CHK_GPA CHECK (GPA>=2.00);`
13. (blank line)
14. `ALTER TABLE Students`
15. `DROP COLUMN GPA;`
16. (blank line)
17. `DROP TABLE Students;`

The Output window at the bottom shows the execution results:

#	Time	Action	Message	Duration / Fetch
111	23:01:46	ALTER TABLE Students ADD CONSTRAINT CHK_GPA CHECK (GPA>=2.00)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	1.937 sec
112	23:01:48	ALTER TABLE Students DROP COLUMN GPA	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	1.563 sec
113	23:01:49	DROP TABLE Students	0 row(s) affected	0.484 sec

#Nothing_Comes_Home..._You_Have