"Heaven's Light is Our Guide"

Rajshahi University of Engineering & Technology, Rajshahi

Department of Electrical & Computer Engineering

Course Code : ECE 2216

Course Title : Data Base Systems Sessional

Experiment No. : 01

Experiment Date : 10 September, 2024

Submission Date : 23 September, 2024

Submitted To-

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Assistant Professor

Department of ECE, RUET

Submitted By-

Sanjana Islam Orpa

Roll : 2110039

1.1 Experiment No. : 01

1.2 Experiment Name: Create a Database Containing Information for 10 Students.

1.3 Objective:

- To understand the process of creating a database using SQL.
- To gain experience in writing SQL queries for creating tables and inserting data.
- To practice executing queries and interpreting the output to ensure successful data management.

1.4 Query and Output:

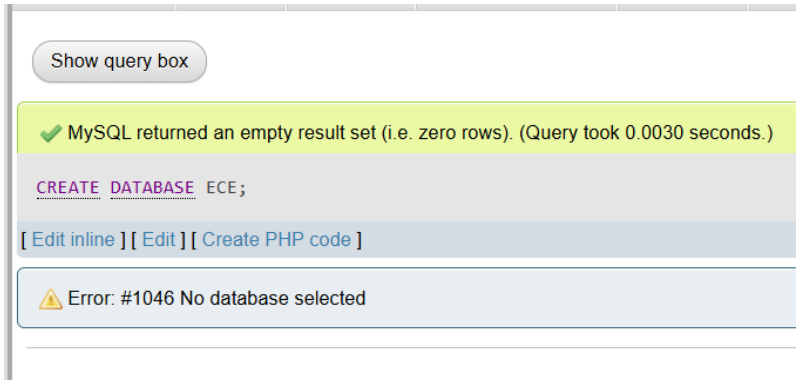
1.4.1 Create database and table

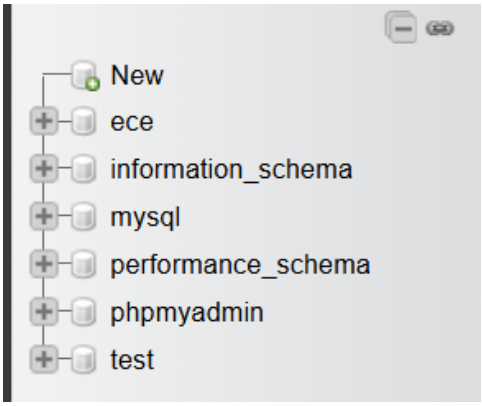
Creating database:

Query:

```
1 CREATE DATABASE ECE;
2
3
```

Output:



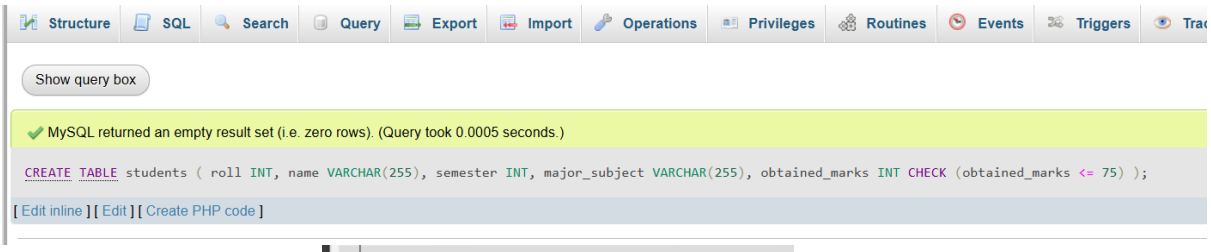


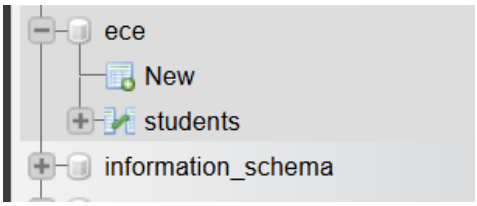
Creating table:

Query:

```
1 CREATE TABLE students (
2     roll INT,
3     name VARCHAR(255),
4     semester INT,
5     major_subject VARCHAR(255),
6     obtained_marks INT CHECK (obtained_marks <= 75)
7 );
8
```

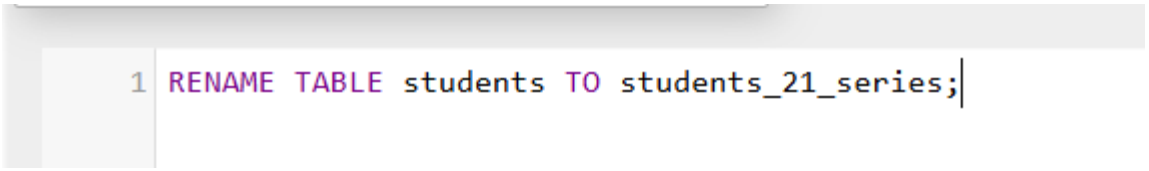
Output:



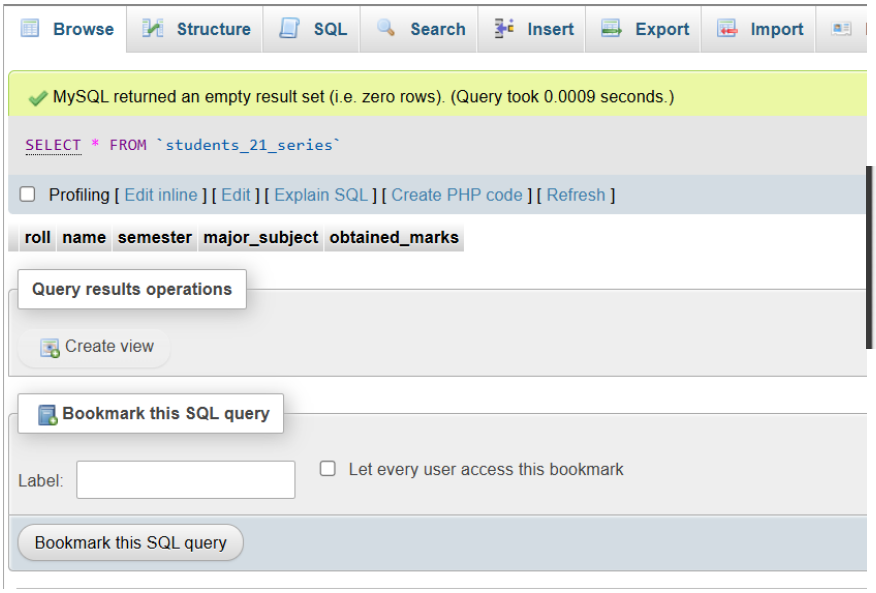


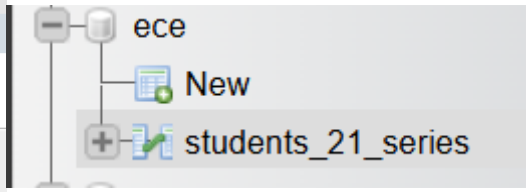
Renaming table:

Query:



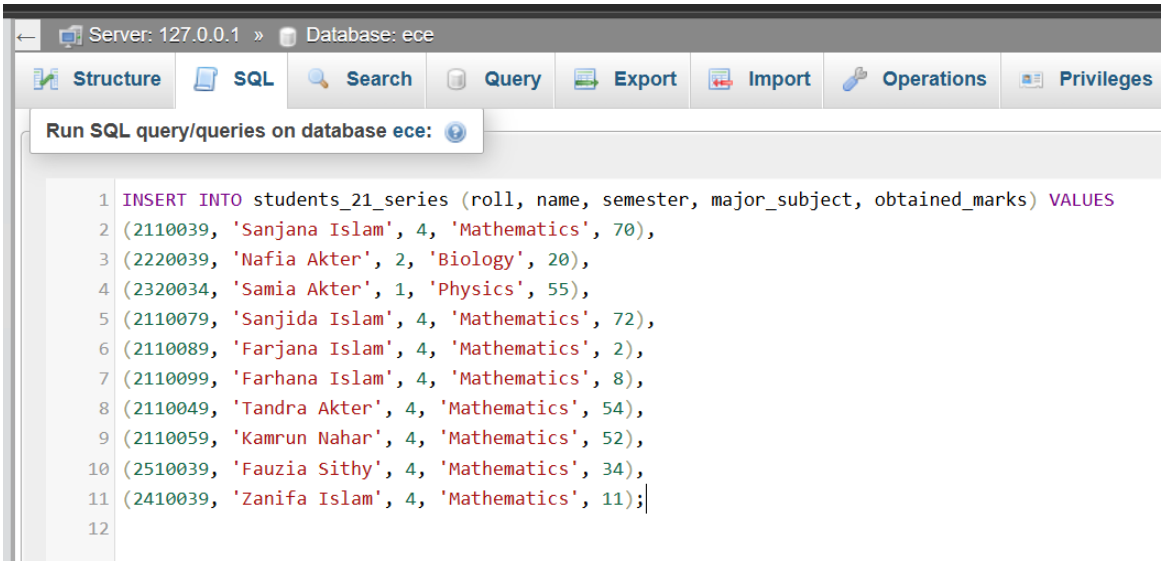
Output:



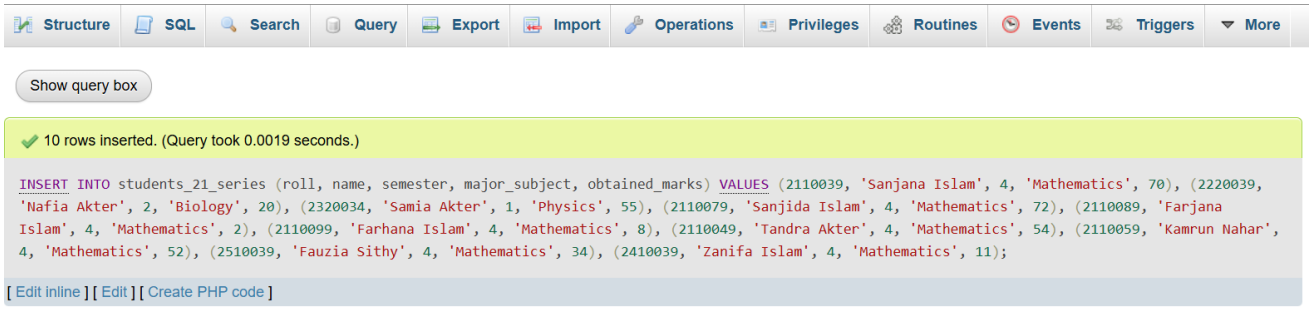


Inserting 10 students info:

Query:



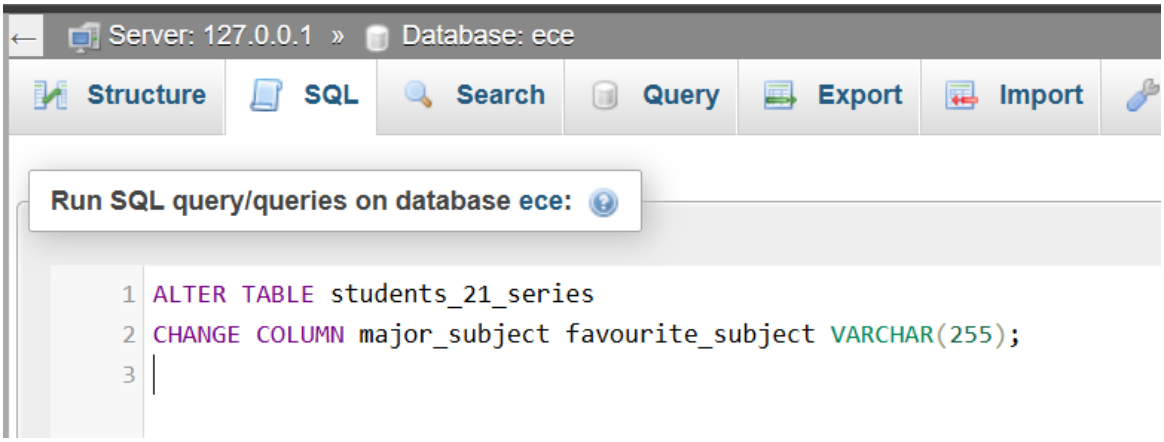
Output:



1.4.2 Change a specific column name and data type.

Changing column name:

Query:

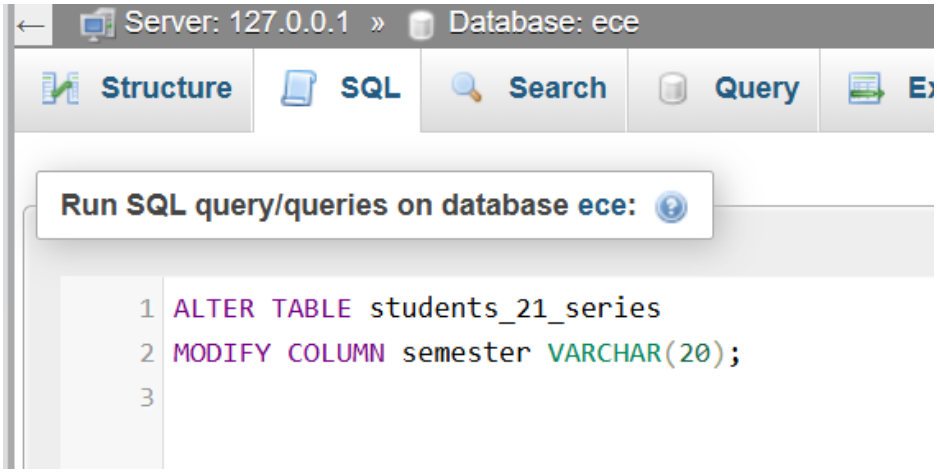


Output:

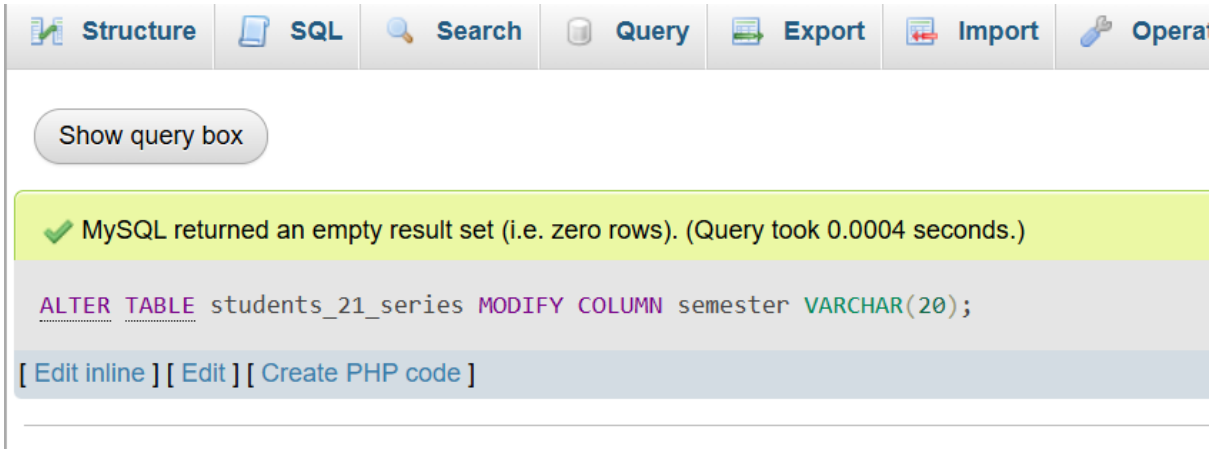
roll	name	semester	favourite_subject	obtained_marks
2110039	Sanjana Islam	4	Mathematics	70
2220039	Nafia Akter	2	Biology	20
2320034	Samia Akter	1	Physics	55
2110079	Sanjida Islam	4	Mathematics	72
2110089	Farjana Islam	4	Mathematics	2
2110099	Farhana Islam	4	Mathematics	8
2110049	Tandra Akter	4	Mathematics	54
2110059	Kamrun Nahar	4	Mathematics	52
2510039	Fauzia Sithy	4	Mathematics	34
2410039	Zanifa Islam	4	Mathematics	11

Changing Data type:

Query:



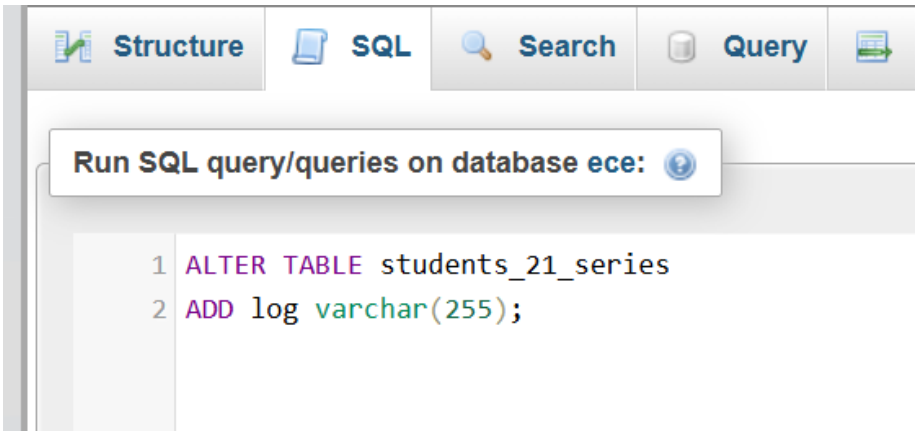
Output:



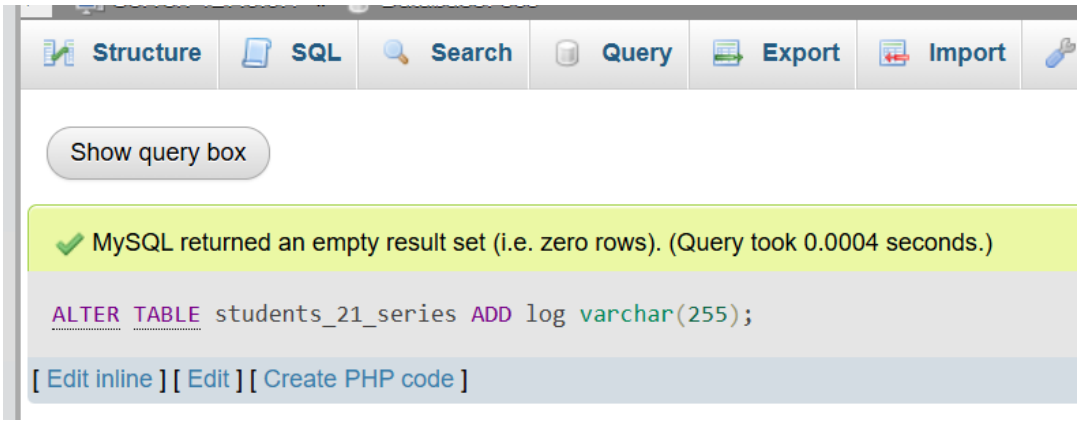
1.4.3 Add a new column named as Log. Set the value applicable and not applicable for the condition(<30)

Adding column:

Query:



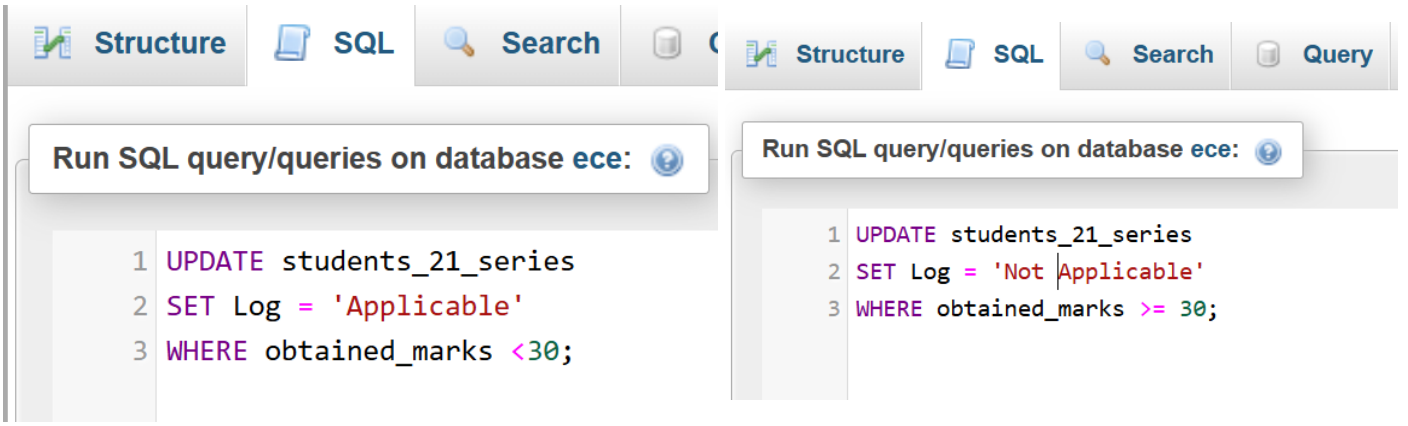
Output:



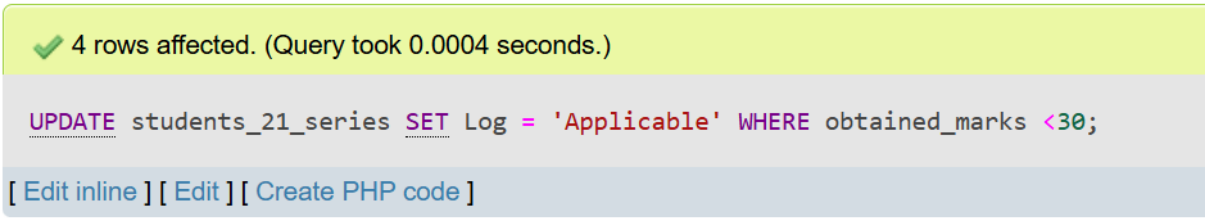
roll	name	semester	favourite_subject	obtained_marks	log
2110039	Sanjana Islam	4	Mathematics	70	NULL
2220039	Nafia Akter	2	Biology	20	NULL
2320034	Samia Akter	1	Physics	55	NULL
2110079	Sanjida Islam	4	Mathematics	72	NULL
2110089	Farjana Islam	4	Mathematics	2	NULL
2110090	Farhana Islam	4	Mathematics	58	NULL
2110040	Zanifa Islam	3	Chemistry	45	NULL
2110050	Tania Akter	2	Biology	29	NULL
2110060	Amina Begum	1	English	60	NULL
2110070	Rita Chowdhury	3	History	5	NULL

Setting the value applicable and not applicable:

Query:



Output:



Show query box

6 rows affected. (Query took 0.0004 seconds.)

```
UPDATE students_21_series SET Log = 'Not Applicable' WHERE obtained_marks >= 30;
```

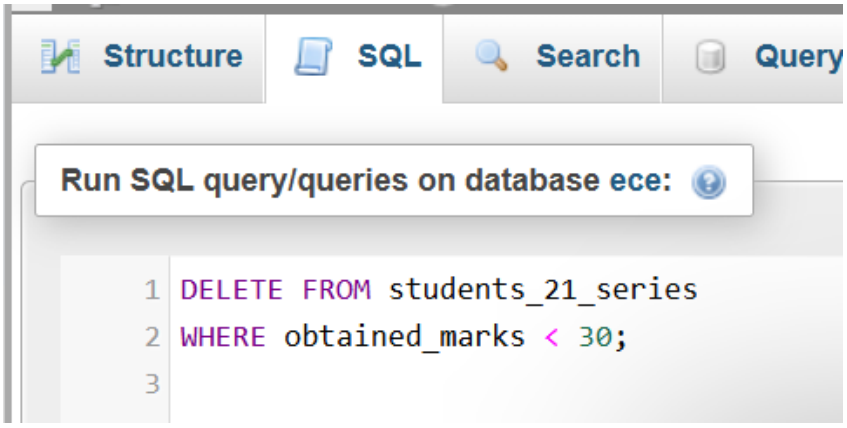
[Edit inline] [Edit] [Create PHP code]

roll	name	semester	favourite_subject	obtained_marks	log
2110039	Sanjana Islam	4	Mathematics	70	Not Applicable
2220039	Nafia Akter	2	Biology	20	Applicable
2320034	Samia Akter	1	Physics	55	Not Applicable
2110079	Sanjida Islam	4	Mathematics	72	Not Applicable
2110089	Farjana Islam	4	Mathematics	2	Applicable
2110090	Farhana Islam	4	Mathematics	58	Not Applicable
2110040	Zanifa Islam	3	Chemistry	45	Not Applicable
2110050	Tania Akter	2	Biology	29	Applicable
2110060	Amina Begum	1	English	60	Not Applicable
2110070	Rita Chowdhury	3	History	5	Applicable

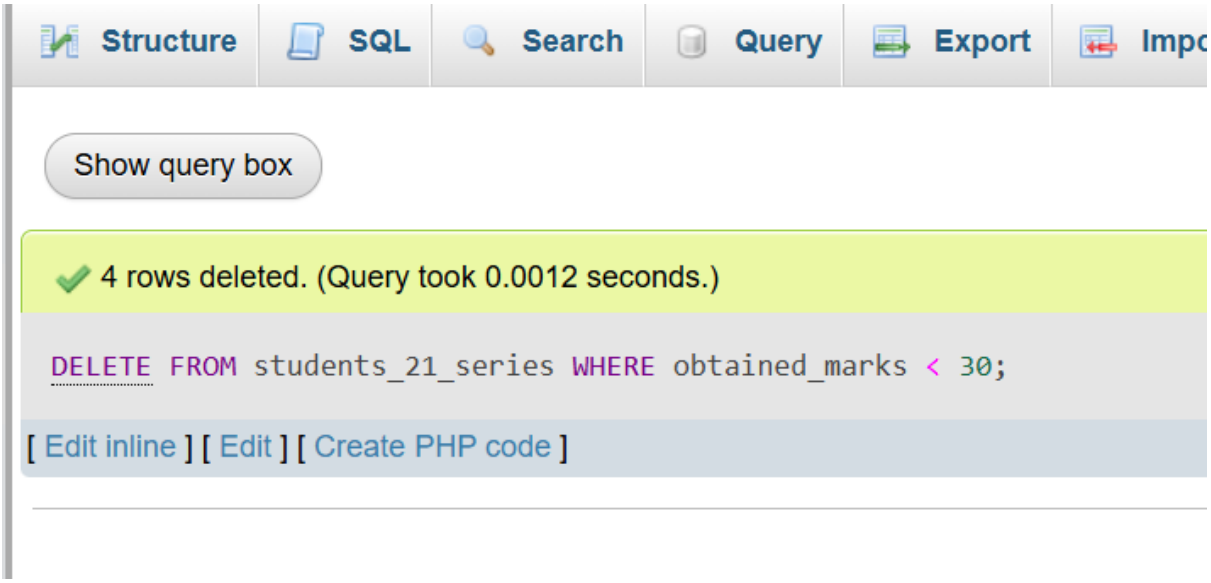
1.4.4 Delete the students info whose marks are below 30.

Deleting the students info whose marks are below 30:

Query:



Output:



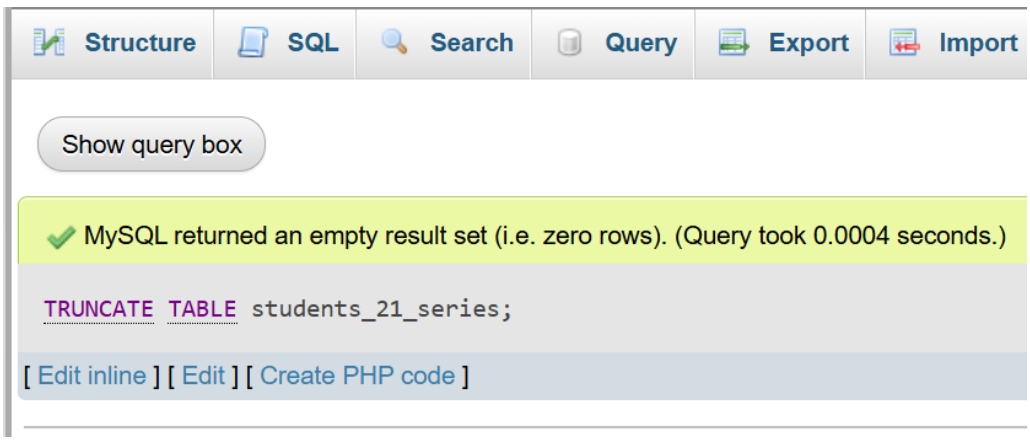
roll	name	semester	favourite_subject	obtained_marks	log
2110039	Sanjana Islam	4	Mathematics	70	Not Applicable
2320034	Samia Akter	1	Physics	55	Not Applicable
2110079	Sanjida Islam	4	Mathematics	72	Not Applicable
2110090	Farhana Islam	4	Mathematics	58	Not Applicable
2110040	Zanifa Islam	3	Chemistry	45	Not Applicable
2110060	Amina Begum	1	English	60	Not Applicable

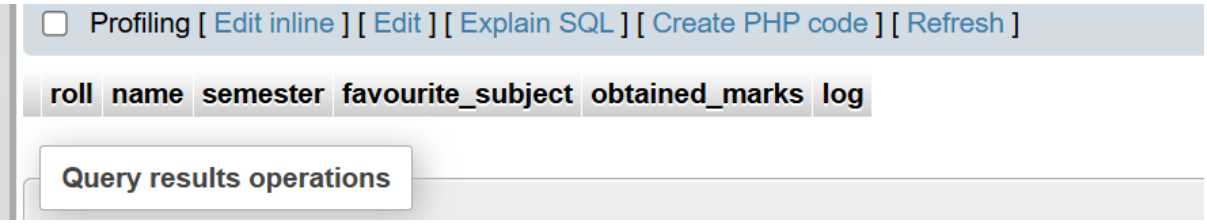
Truncating the table to remove all data:

Query:

```
1 TRUNCATE TABLE students_21_series;
```

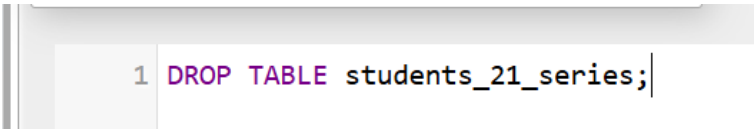
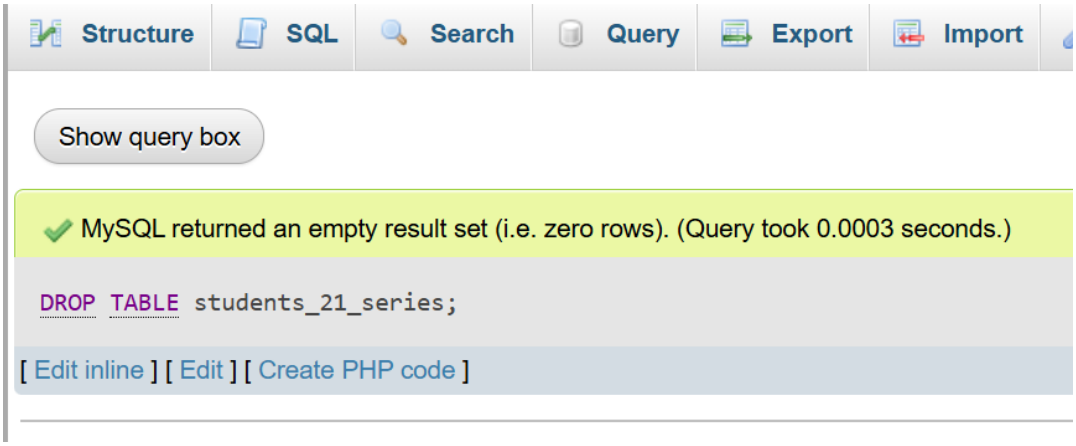
Output:





Dropping the table:

Query:



Output: