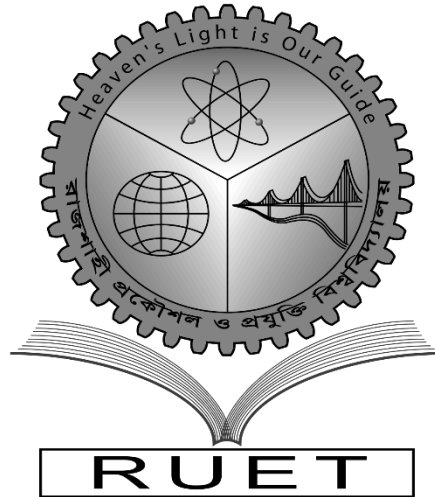


“Heaven’s Light is Our Guide

Rajshahi University of Engineering & Technology
Rajshahi, Bangladesh



Department of Electrical & Computer Engineering
(ECE-21)

Course Code: ECE 2216

Course Title: Data Base Systems Sessional

Experiment No: 01

Date of Submission: 23/09/2024

Submitted To:

Oishi Jyoti
Assistant Professor
Department of ECE
Rajshahi University of Engineering &
Technology

Submitted By:

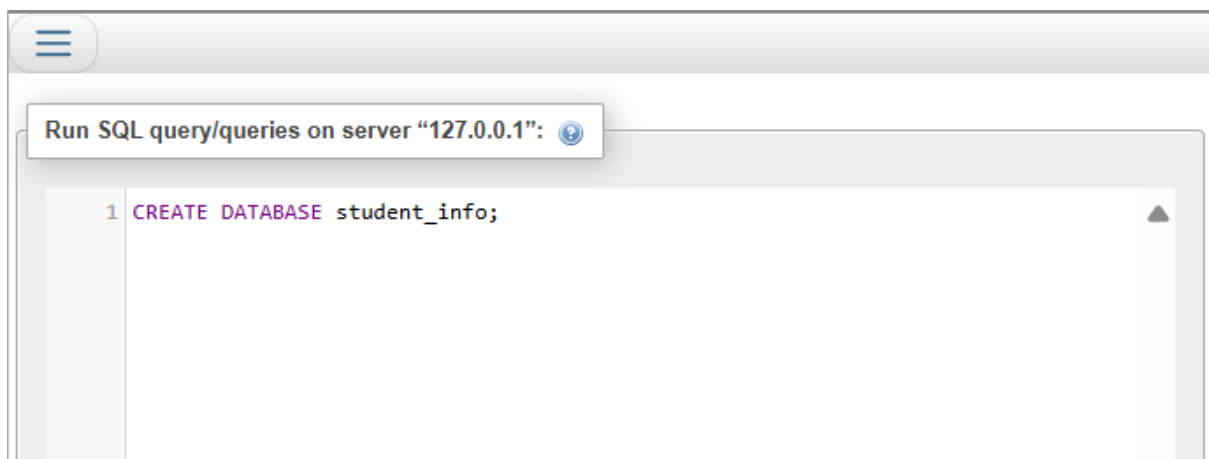
Faez Mahmud
Roll: 2110032
ECE-21 Series

Task 1: Create a database containing following info for 10 students

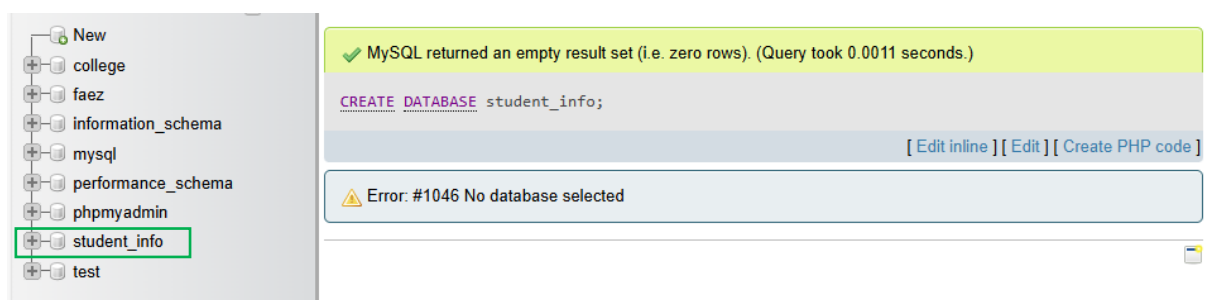
- 1.Roll**
- 2.Name**
- 3.Semester**
- 4.Major/ Favorite subject**
- 5.Obtained Marks (75)**

Task 1.1: Create Database and Table

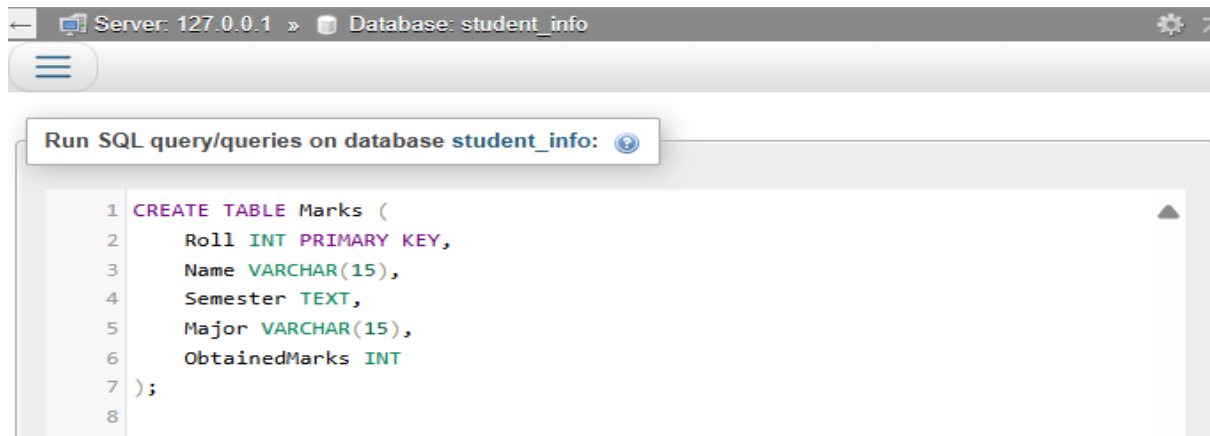
Creating database:



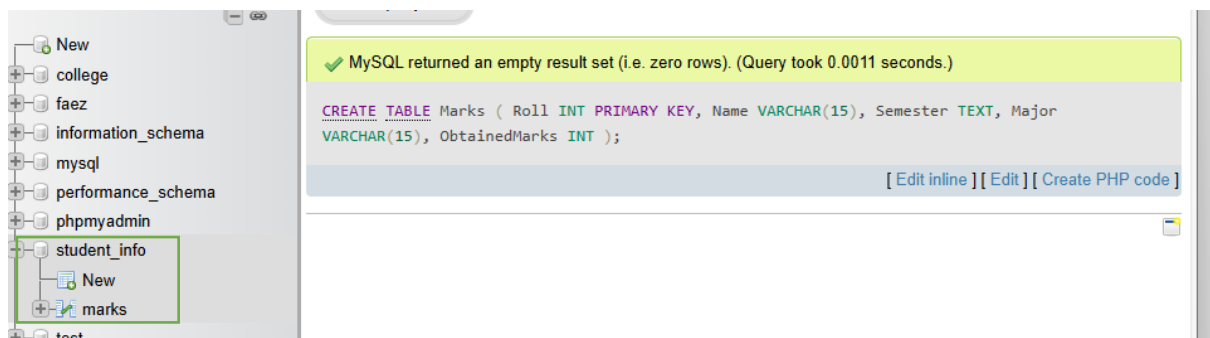
Output:



Creating Table:



Output:






























Inserting Values:

Run SQL query/queries on table student_info.marks: ?

```
1 INSERT INTO marks
2     (Roll,Name,Semester,Major,ObtainedMarks)
3     VALUES(2110031,'Sakin','Even','CS',45),
4
5     (2110032,'Faez','Even','CS',70),
6
7     (2110033,'Tasnuva','Even','CS',64),
8
9     (2110034,'Trisha','Even','CS',56),
10
11    (2110035,'Mohona','Even','EEE',28),
12
13    (2110037,'Tariful','Odd','CS',44),
14
15    (2110038,'Nayeem','Even','EEE',21),
16
17    (2110039,'A.Rafiu','Even','CS',29),
18
19    (2110040,'Nuha','Odd','EEE',66);
20
21
```

Output:

<div><div><div>←</div><div>T</div><div>→</div></div><div></div></div>						Roll	Name	Semester	Major	ObtainedMarks
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110031	Sakin	Even	CS	45		
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110032	Faez	Even	CS	70		
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110033	Tasnuva	Even	CS	64		
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110034	Trisha	Even	CS	56		
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110035	Mohona	Even	EEE	28		
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110037	Tariful	Odd	CS	44		
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110038	Nayeem	Even	EEE	21		
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110039	A.Rafiu	Even	CS	29		
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110040	Nuha	Odd	EEE	66		

Task 1.2: Change a specific column name and data type.

Run SQL query/queries on table student_info.marks: ⓘ

```
1 ALTER TABLE marks
2 CHANGE Major favorite_subject TEXT;
3
```

Output:

<div><div>←</div><div>T</div><div>→</div></div>				Roll	Name	Semester	favorite_subject	ObtainedMarks				
<input type="checkbox"/>		Edit		Copy		Delete	2110031	Sakin	Even	CS	45	
<input type="checkbox"/>		Edit		Copy		Delete	2110032	Faez	Even	CS	70	
<input type="checkbox"/>		Edit		Copy		Delete	2110033	Tasnuva	Even	CS	64	
<input type="checkbox"/>		Edit		Copy		Delete	2110034	Trisha	Even	CS	56	
<input type="checkbox"/>		Edit		Copy		Delete	2110035	Mohona	Even	EEE	28	
<input type="checkbox"/>		Edit		Copy		Delete	2110037	Tariful	Odd	CS	44	
<input type="checkbox"/>		Edit		Copy		Delete	2110038	Nayeem	Even	EEE	21	
<input type="checkbox"/>		Edit		Copy		Delete	2110039	A.Rafiu	Even	CS	29	
<input type="checkbox"/>		Edit		Copy		Delete	2110040	Nuha	Odd	EEE	66	
↑	<input type="checkbox"/>	Check all	With selected:			Edit		Copy		Delete		Export

Task 1.3: Add a new column named as log, set the value applicable and not applicable for the condition (<30)

First added a column named log:

```
1 ALTER TABLE marks
2 ADD log VARCHAR(20);
3
4
```









Output:

	Roll	Name	Semester	favorite_subject	ObtainedMarks	log
<input type="checkbox"/> Edit Copy Delete	2110031	Sakin	Even	CS	45	NULL
<input type="checkbox"/> Edit Copy Delete	2110032	Faez	Even	CS	70	NULL
<input type="checkbox"/> Edit Copy Delete	2110033	Tasnuva	Even	CS	64	NULL
<input type="checkbox"/> Edit Copy Delete	2110034	Trisha	Even	CS	56	NULL
<input type="checkbox"/> Edit Copy Delete	2110035	Mohona	Even	EEE	28	NULL
<input type="checkbox"/> Edit Copy Delete	2110037	Tariful	Odd	CS	44	NULL
<input type="checkbox"/> Edit Copy Delete	2110038	Nayeem	Even	EEE	21	NULL
<input type="checkbox"/> Edit Copy Delete	2110039	A.Rafiu	Even	CS	29	NULL
<input type="checkbox"/> Edit Copy Delete	2110040	Nuha	Odd	EEE	66	NULL

Updating new column according to the condition:

```
Run SQL query/queries on table student_info.marks:
1 UPDATE marks
2 SET log = CASE
3     WHEN ObtainedMarks < 30 THEN 'applicable'
4     ELSE 'not applicable'
5 END;
6
```

Output:

← T →			Roll	Name	Semester	favorite_subject	ObtainedMarks	log
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110031	Sakin	Even	CS	45 not applicable
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110032	Faez	Even	CS	70 not applicable
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110033	Tasnuva	Even	CS	64 not applicable
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110034	Trisha	Even	CS	56 not applicable
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110035	Mohona	Even	EEE	28 applicable
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110037	Tariful	Odd	CS	44 not applicable
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110038	Nayeem	Even	EEE	21 applicable
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110039	A.Rafiu	Even	CS	29 applicable
<input type="checkbox"/>	 Edit	 Copy	 Delete	2110040	Nuha	Odd	EEE	66 not applicable

Task1.4: Delete the student info whose marks are below 30.

The students have below 30:

```
1 SELECT * FROM marks
2 WHERE ObtainedMarks < 30;
```


Output:

		Roll	Name	Semester	favorite_subject	ObtainedMarks	log
<input type="checkbox"/>	Edit Copy Delete	2110035	Mohona	Even	EEE	28	applicable
<input type="checkbox"/>	Edit Copy Delete	2110038	Nayeem	Even	EEE	21	applicable
<input type="checkbox"/>	Edit Copy Delete	2110039	A.Rafiu	Even	CS	29	applicable

Deleting them:

```
1 DELETE FROM marks
2 WHERE ObtainedMarks < 30;
3
```

Output:

				Roll	Name	Semester	favorite_subject	ObtainedMarks	log
<input type="checkbox"/>				2110031	Sakin	Even	CS	45	not applicable
<input type="checkbox"/>				2110032	Faez	Even	CS	70	not applicable
<input type="checkbox"/>				2110033	Tasnuva	Even	CS	64	not applicable
<input type="checkbox"/>				2110034	Trisha	Even	CS	56	not applicable
<input type="checkbox"/>				2110037	Tariful	Odd	CS	44	not applicable
<input type="checkbox"/>				2110040	Nuha	Odd	EEE	66	not applicable