localhost/phpmyadmin/index.php?route=/database/structure&server=1&db=student+faculty+database

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Server: 127.0.0.1 » Database: student faculty database

Structure | SQL | Search | Query | Export | Import | Operations | Privileges | Routines | Events | Triggers | Tracking | More

Filters

Containing the word:

	Table	Action	Rows	Type	Collation	Size	Overhead
☐	class	Browse Structure Search Insert Empty Drop	8	InnoDB	utf8mb4_general_ci	32.0 KiB	-
☐	enrolled	Browse Structure Search Insert Empty Drop	11	InnoDB	utf8mb4_general_ci	32.0 KiB	-
☐	faculty	Browse Structure Search Insert Empty Drop	5	InnoDB	utf8mb4_general_ci	16.0 KiB	-
☐	student	Browse Structure Search Insert Empty Drop	6	InnoDB	utf8mb4_general_ci	16.0 KiB	-
	4 tables	Sum	30	InnoDB	utf8mb4_general_ci	96.0 KiB	0 B

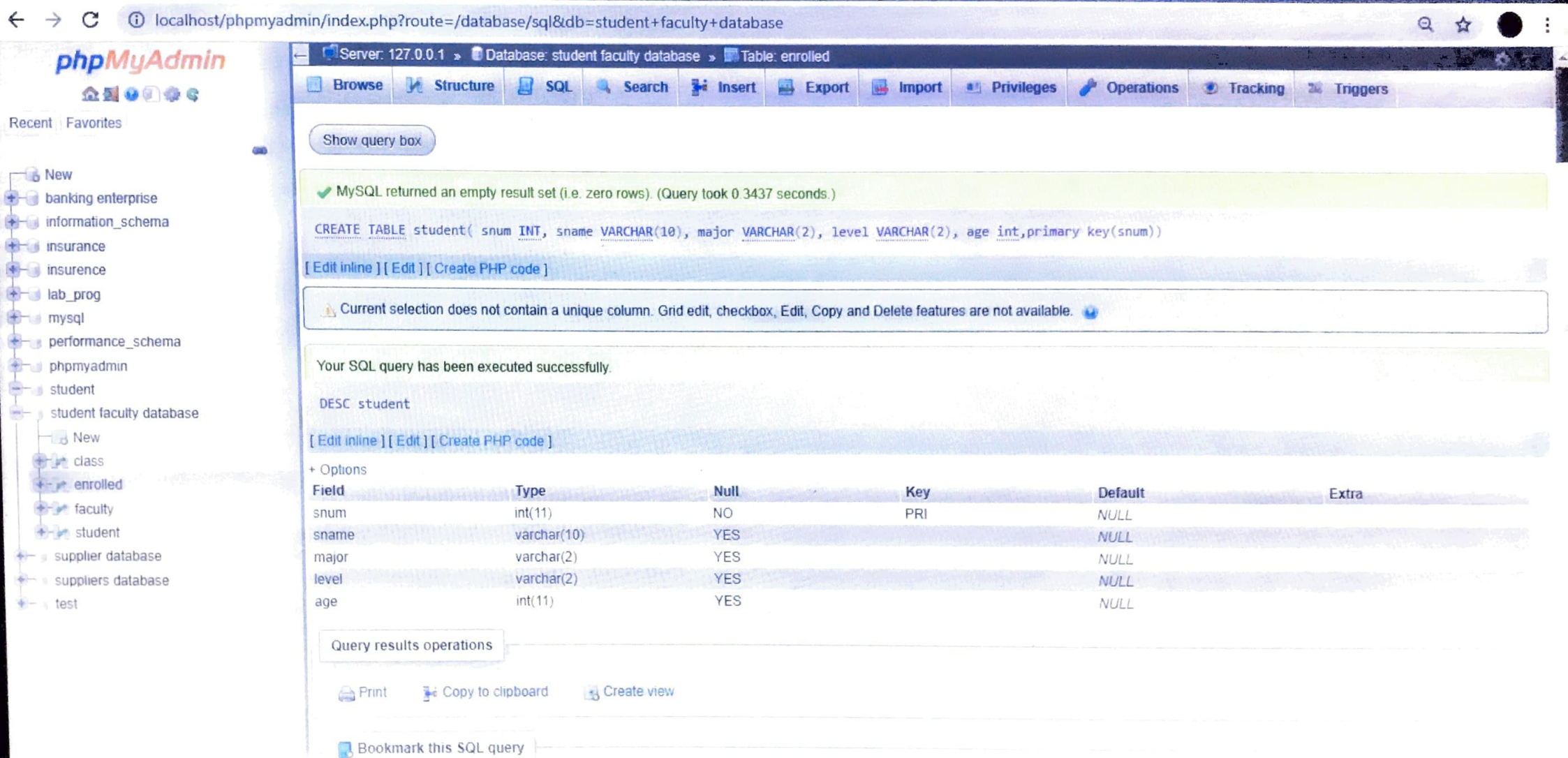
Check all With selected:

Print Data dictionary

Create table

Name: Number of columns: 4

Go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Server: 127.0.0.1 » Database: student faculty database » Table: enrolled
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers
Show query box
MySQL returned an empty result set (i.e. zero rows). (Query took 0.3437 seconds.)
CREATE TABLE student(snum INT, sname VARCHAR(10), major VARCHAR(2), level VARCHAR(2), age int,primary key(snum))
[Edit inline] [Edit] [Create PHP code]
Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.
Your SQL query has been executed successfully.
DESC student
[Edit inline] [Edit] [Create PHP code]
+ Options
Field Type Null Key Default Extra
snum int(11) NO PRI NULL
sname varchar(10) YES NULL
major varchar(2) YES NULL
level varchar(2) YES NULL
age int(11) YES NULL
Query results operations
Print Copy to clipboard Create view
Bookmark this SQL query

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Server: 127.0.0.1 » Database: student faculty database » Table: enrolled

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Tracking | Triggers

MySQL returned an empty result set (i.e. zero rows). (Query took 0.4361 seconds.)

```
CREATE TABLE class( cname VARCHAR(20), meets_at VARCHAR(10), room VARCHAR(10), fid INT, PRIMARY KEY(cname), FOREIGN KEY(fid) REFERENCES faculty(fid))
```

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

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Your SQL query has been executed successfully.

```
DESC class
```

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

+ Options

Field	Type	Null	Key	Default	Extra
cname	varchar(20)	NO	PRI	NULL	
meets_at	varchar(10)	YES		NULL	
room	varchar(10)	YES		NULL	
fid	int(11)	YES	MUL	NULL	

Query results operations

Print | Copy to clipboard | Create view

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Server: 127.0.0.1 » Database: student faculty database » Table: enrolled

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Tracking | Triggers

```
INSERT INTO student (snum,sname,major,level,age) VALUES(1,'jhon','CS','Sr',19), (2,'smith','CS','Jr',20), (3,'jacob','CV','Sr',20), (4,'tom','CS','Jr',20),
(5,'sid','CS','Jr',20), (6,'harry','CS','Sr',21)
```

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

Showing rows 0 - 5 (6 total, Query took 0.0037 seconds.)

```
SELECT * FROM student
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

				snum	sname	major	level	age
☐	Edit	Copy	Delete	1	jhon	CS	Sr	19
☐	Edit	Copy	Delete	2	smith	CS	Jr	20
☐	Edit	Copy	Delete	3	jacob	CV	Sr	20
☐	Edit	Copy	Delete	4	tom	CS	Jr	20
☐	Edit	Copy	Delete	5	sid	CS	Jr	20
☐	Edit	Copy	Delete	6	harry	CS	Sr	21

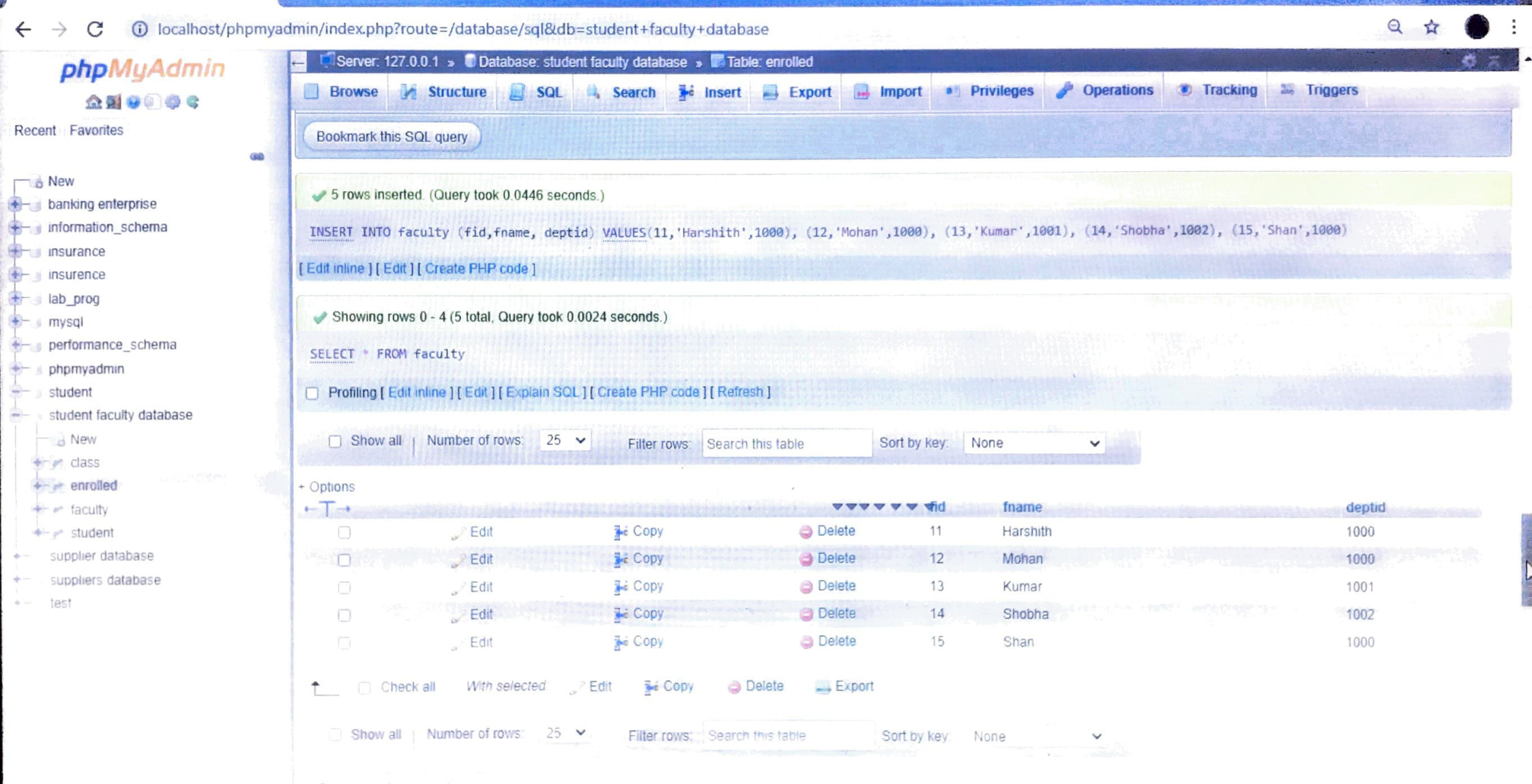
Check all | With selected: Edit | Copy | Delete | Export

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

Print | Copy to clipboard | Export | Display chart | Create view

Console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Server: 127.0.0.1 » Database: student faculty database » Table: enrolled
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers
Bookmark this SQL query
5 rows inserted. (Query took 0.0446 seconds.)
INSERT INTO faculty (fid,fname, deptid) VALUES(11,'Harshith',1000), (12,'Mohan',1000), (13,'Kumar',1001), (14,'Shobha',1002), (15,'Shan',1000)
[Edit inline] [Edit] [Create PHP code]
Showing rows 0 - 4 (5 total, Query took 0.0024 seconds.)
SELECT * FROM faculty
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
+ Options
fid fname deptid
Edit Copy Delete 11 Harshith 1000
Edit Copy Delete 12 Mohan 1000
Edit Copy Delete 13 Kumar 1001
Edit Copy Delete 14 Shobha 1002
Edit Copy Delete 15 Shan 1000
Check all With selected: Edit Copy Delete Export
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

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Server: 127.0.0.1 » Database: student faculty database » Table: enrolled

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Tracking | Triggers

✔ 11 rows inserted. (Query took 0.0348 seconds.)

```
INSERT INTO enrolled (snum,cname) VALUES(1,'class1'), (2,'class1'), (4,'class3'), (3,'class3'), (5,'class4'), (1,'class5'), (2,'class5'), (3,'class5'),
(4,'class5'), (5,'class5'), (6,'class5')
```

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

✔ Showing rows 0 - 10 (11 total, Query took 0.0025 seconds.)

```
SELECT * FROM enrolled
```

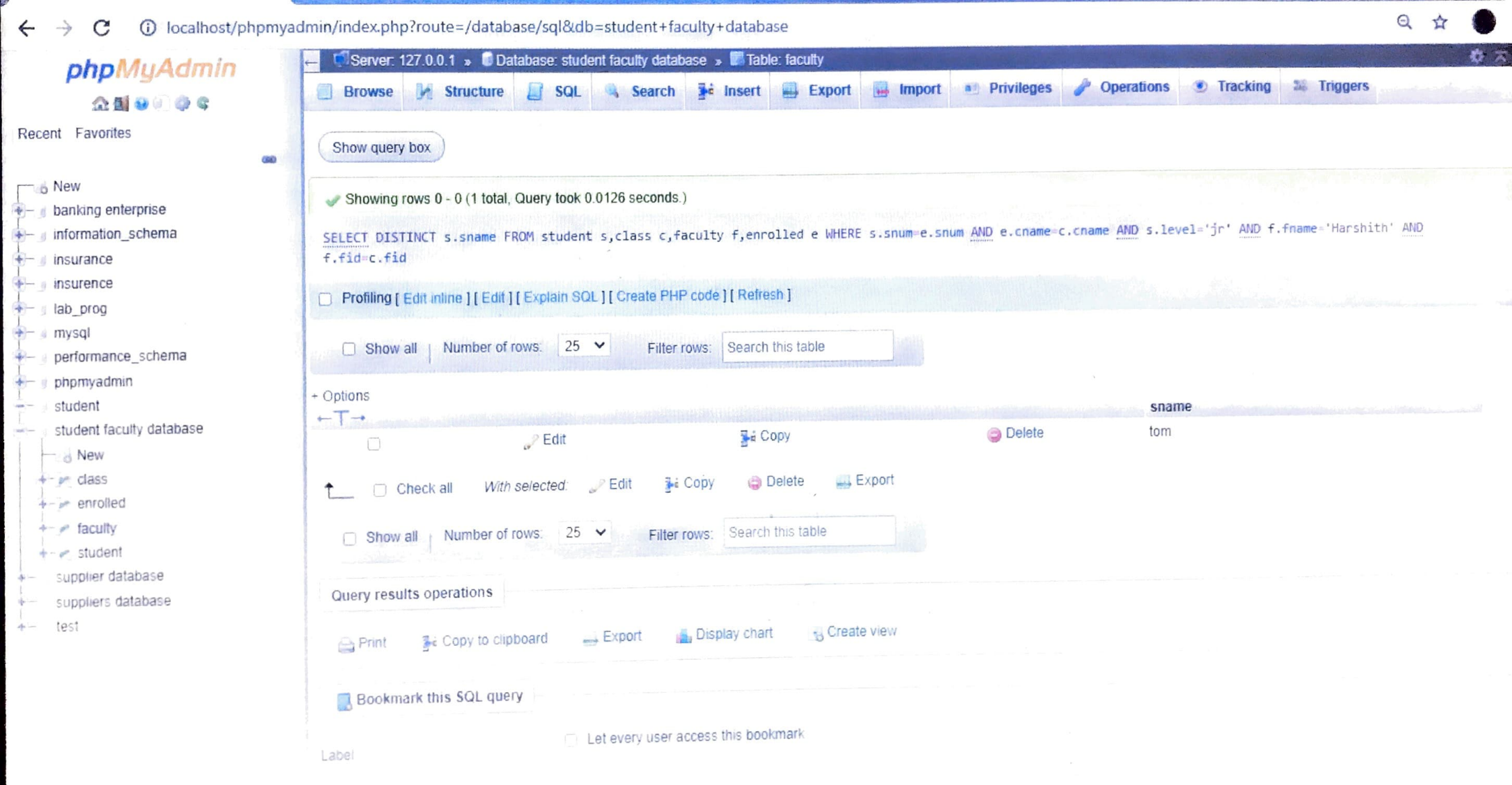
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

+ Options

				snum	cname
☐	Edit	Copy	Delete	1	class1
☐	Edit	Copy	Delete	1	class5
☐	Edit	Copy	Delete	2	class1
☐	Edit	Copy	Delete	2	class5
☐	Edit	Copy	Delete	3	class3
☐	Edit	Copy	Delete	3	class5
☐	Edit	Copy	Delete	4	class3
☐	Edit	Copy	Delete	4	class5
☐	Edit	Copy	Delete	5	class4
☐	Edit	Copy	Delete	5	class5
☐	Edit	Copy	Delete	6	class5

Console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Browse
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Show query box
Showing rows 0 - 0 (1 total, Query took 0.0126 seconds.)
SELECT DISTINCT s.sname FROM student s,class c,faculty f,enrolled e WHERE s.snum=e.snum AND e.cname=c.cname AND s.level='jr' AND f.fname='Harshith' AND f.fid=c.fid
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all
Number of rows: 25
Filter rows: Search this table
+ Options
sname
Edit
Copy
Delete
tom
Check all
With selected:
Edit
Copy
Delete
Export
Show all
Number of rows: 25
Filter rows: Search this table
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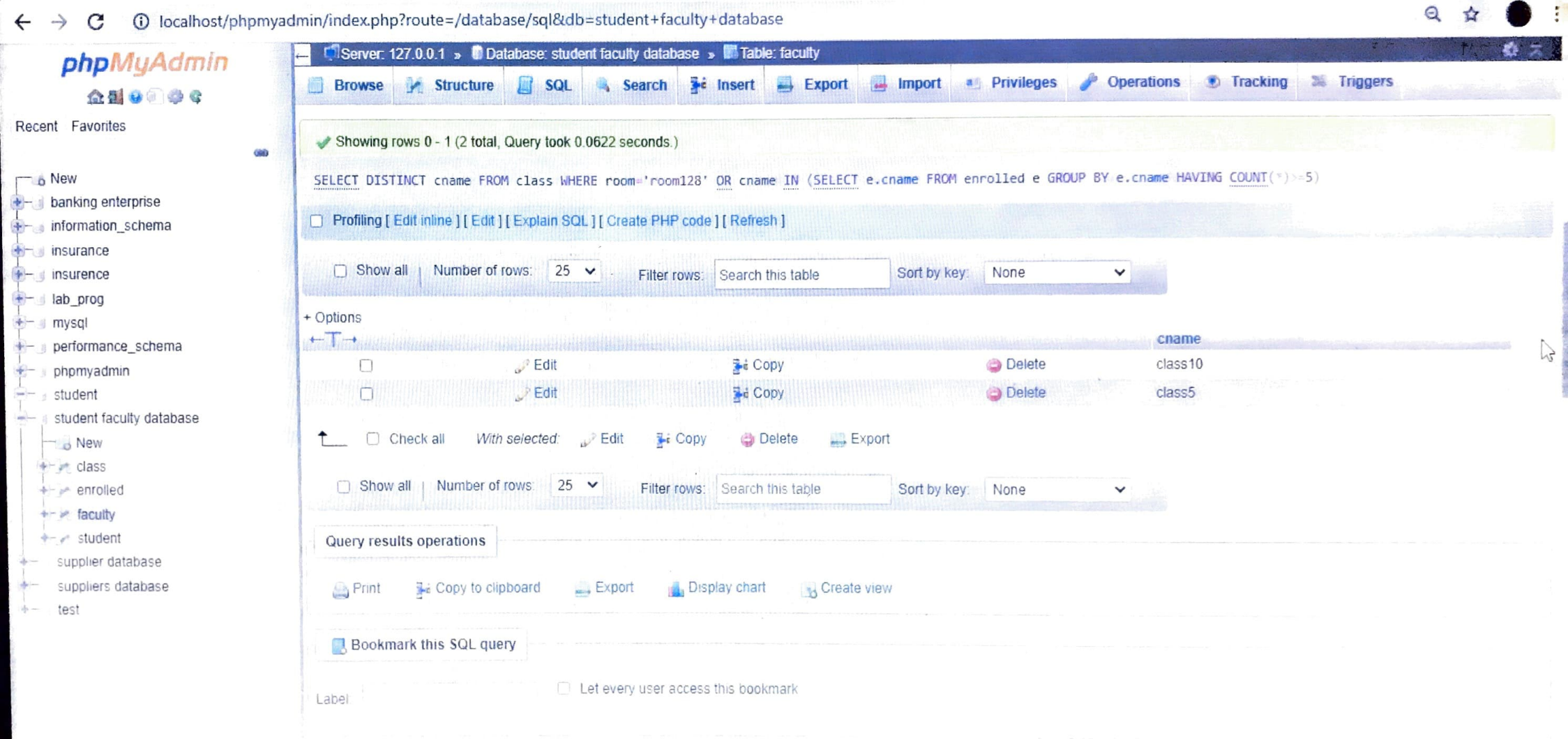
Print
Copy to clipboard
Export
Display chart
Create view
Bookmark this SQL query
Let every user access this bookmark
Label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Server: 127.0.0.1 » Database: student faculty database » Table: faculty
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers
Showing rows 0 - 1 (2 total, Query took 0.0622 seconds.)
SELECT DISTINCT cname FROM class WHERE room='room128' OR cname IN (SELECT e.cname FROM enrolled e GROUP BY e.cname HAVING COUNT(*)>5)
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
+ Options
cname
Edit Copy Delete class10
Edit Copy Delete class5
Check all With selected: Edit Copy Delete Export
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
Query results operations
Print Copy to clipboard Export Display chart Create view
Bookmark this SQL query
Label
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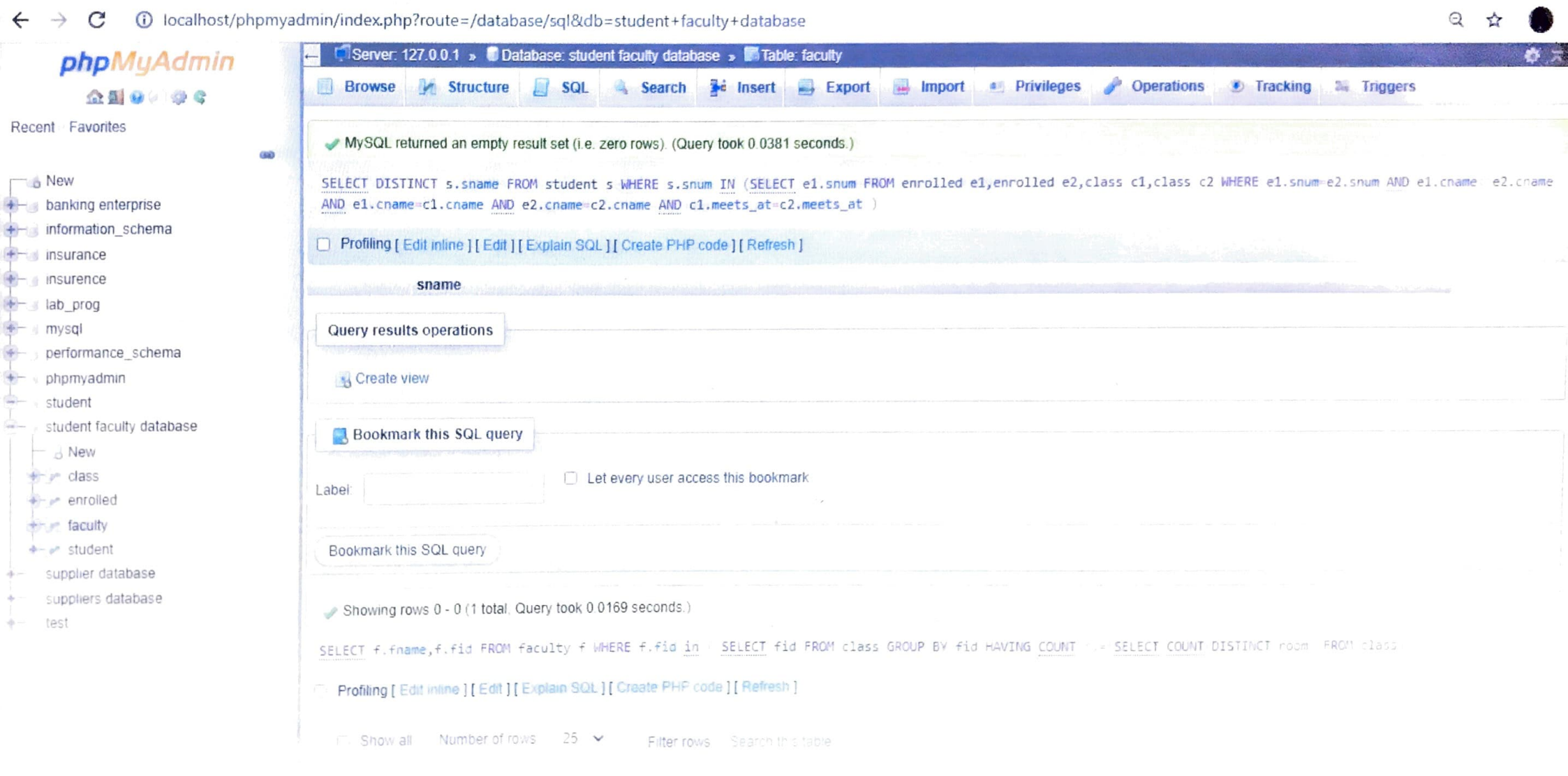
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Server: 127.0.0.1 » Database: student faculty database » Table: faculty
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers
MySQL returned an empty result set (i.e. zero rows). (Query took 0.0381 seconds.)
SELECT DISTINCT s.sname FROM student s WHERE s.snum IN (SELECT e1.snum FROM enrolled e1,enrolled e2,class c1,class c2 WHERE e1.snum=e2.snum AND e1.cname <> e2.cname AND e1.cname=c1.cname AND e2.cname=c2.cname AND c1.meets_at=c2.meets_at)
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
sname
Query results operations
Create view
Bookmark this SQL query
Label:
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Bookmark this SQL query
Showing rows 0 - 0 (1 total, Query took 0.0169 seconds.)
SELECT f.fname,f.fid FROM faculty f WHERE f.fid in (SELECT fid FROM class GROUP BY fid HAVING COUNT (*) = (SELECT COUNT DISTINCT room FROM class
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all Number of rows 25 Filter rows: Search this table

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  - student
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Server: 127.0.0.1 » Database: student faculty database » Table: faculty

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Tracking | Triggers

Bookmark this SQL query

Showing rows 0 - 0 (1 total, Query took 0.0169 seconds.)

```
SELECT f.fname,f.fid FROM faculty f WHERE f.fid in ( SELECT fid FROM class GROUP BY fid HAVING COUNT(*)=(SELECT COUNT(DISTINCT room) FROM class) )
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table

+ Options

	fname	fid
Edit Copy Delete	Shobha	14

Check all With selected: Edit Copy Delete Export

Show all | Number of rows: 25 Filter rows: Search this table

Query results operations

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Bookmark this SQL query

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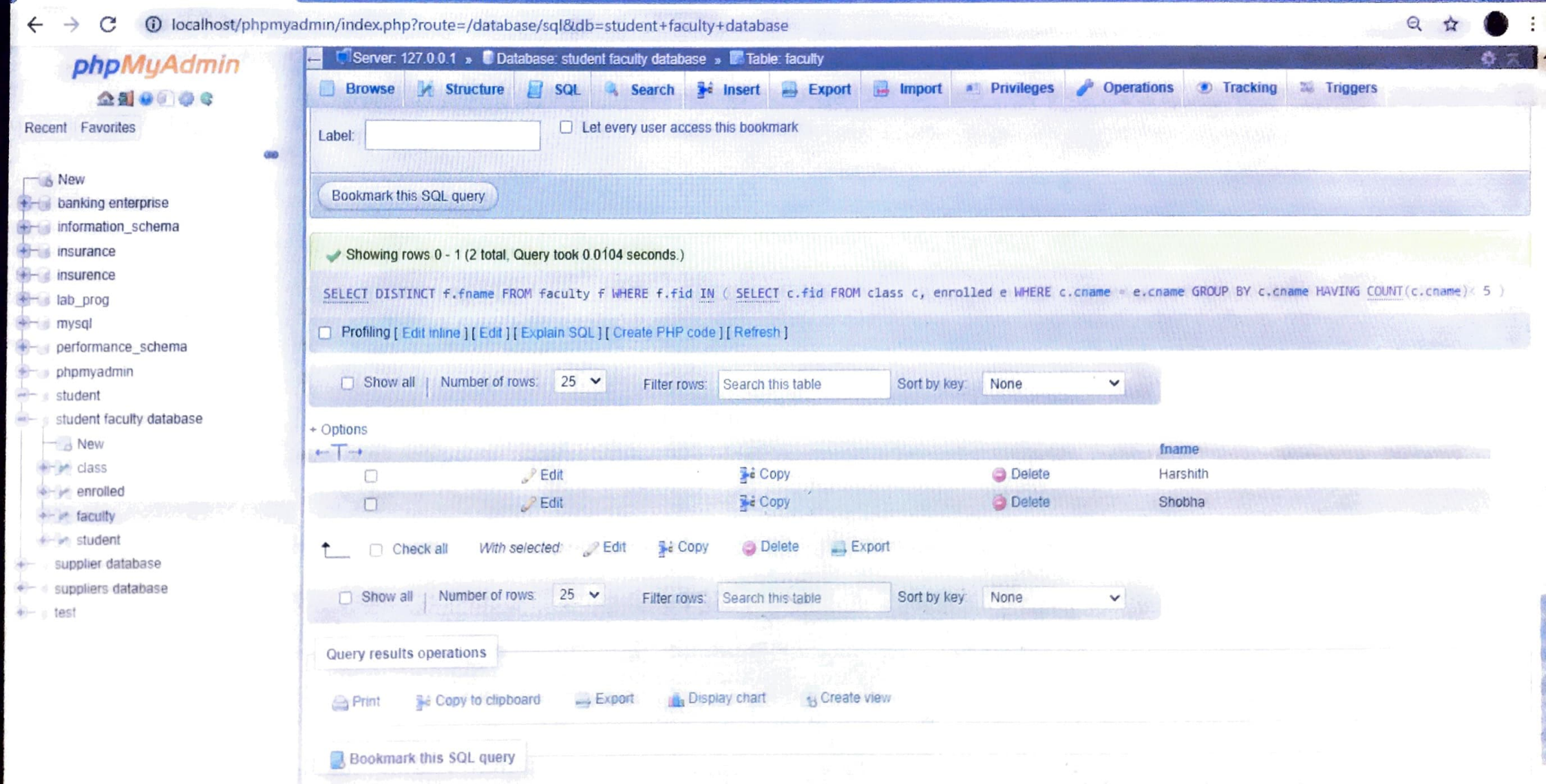
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Showing rows 0 - 1 (2 total, Query took 0.0104 seconds.)
SELECT DISTINCT f.fname FROM faculty f WHERE f.fid IN (SELECT c.fid FROM class c, enrolled e WHERE c.cname = e.cname GROUP BY c.cname HAVING COUNT(c.cname) < 5)
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
+ Options
fname
Edit Copy Delete Harshith
Edit Copy Delete Shobha
Check all With selected: Edit Copy Delete Export
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
Query results operations
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Bookmark this SQL query

```
CREATE DATABASE student;


 CREATE TABLE student(
        snum INT,
        sname VARCHAR(10),
        major VARCHAR(2),
        level VARCHAR(2),
        age int,primary key(snum));
 DESC student;

 CREATE TABLE faculty(
        fid INT,fname VARCHAR(20),
        deptid INT,
        PRIMARY KEY(fid));
 DESC faculty;


CREATE TABLE class(
        cname VARCHAR(20),
        meets_at VARCHAR(10),
        room VARCHAR(10),
        fid INT,
        PRIMARY KEY(cname),
        FOREIGN KEY(fid) REFERENCES faculty(fid));
 DESC class;


CREATE TABLE enrolled(
        snum INT,
        cname VARCHAR(20),
        PRIMARY KEY(snum,cname),
        FOREIGN KEY(snum) REFERENCES student(snum),
        FOREIGN KEY(cname) REFERENCES class(cname));
 DESC enrolled;
```

lab4.txt - Notepad

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```
 INSERT INTO student (snum,sname,major,level,age)
 VALUES(1,'jhon','CS','Sr',19),
(2,'smith','CS','Jr',20),
(3,'jacob','CV','Sr',20),
(4,'tom','CS','Jr',20),
(5,'sid','CS','Jr',20),
(6,'harry','CS','Sr',21);

SELECT * FROM student;

INSERT INTO faculty (fid,fname, deptid)
 VALUES(11,'Harshith',1000),
(12,'Mohan',1000),
(13,'Kumar',1001),
(14,'Shobha',1002),
(15,'Shan',1000);

SELECT * FROM faculty;

INSERT INTO class (cname,meets_at,room,fid)
VALUES('class1','noon','room1',14),
('class10','morning','room128',14),
('class2','morning','room2',12),
('class3','morning','room3',11),
('class4','evening','room4',14),
('class5','night','room3',15),
('class6','morning','room2',14),
('class7','morning','room3',14);


INSERT INTO enrolled (snum,cname)
VALUES(1,'class1'),
(2,'class1'),
(4,'class3'),
(3,'class3'),
(5,'class4'),
```

```
INSERT INTO enrolled (snum,cname)
VALUES(1,'class1'),
(2,'class1'),
(4,'class3'),
(3,'class3'),
(5,'class4'),
(1,'class5'),
(2,'class5'),
(3,'class5'),
(4,'class5'),
(5,'class5'),
(6,'class5');
SELECT * FROM enrolled;



Query 1: Find the names of all juniors (level=Jr) who are enrolled for class taught by professor Harshith.
SELECT DISTINCT s.sname
        FROM student s,class c,faculty f,enrolled e
        WHERE  s.snum=e.snum      AND
               e.cname=c.cname    AND
           s.level='jr'   AND
               f.fname='Harshith' AND
               f.fid=c.fid;



Query 2: Find the names of all classes that either meet in room128 or have 5 or more students enrolled.
SELECT DISTINCT cname
        FROM class
        WHERE room='room128'
        OR
        cname IN (SELECT e.cname FROM enrolled e GROUP BY e.cname HAVING COUNT(*)>=5);

Query 3: Find the names of all students who are enrolled in two classes that meet at same time.
```

Query 2: Find the names of all classes that either meet in room128 or have 5 or more students enrolled.

```
SELECT DISTINCT cname
        FROM class
        WHERE room='room128'
        OR
        cname IN (SELECT e.cname FROM enrolled e GROUP BY e.cname HAVING COUNT(*)>=5);
```

Query 3: Find the names of all students who are enrolled in two classes that meet at same time.

```
SELECT DISTINCT s.sname
        FROM student s
        WHERE s.snum IN (SELECT e1.snum
                                FROM enrolled e1,enrolled e2,class c1,class c2
                                WHERE e1.snum=e2.snum   AND
                                e1.cname<>e2.cname      AND
                                e1.cname=c1.cname       AND
                                e2.cname=c2.cname       AND
                                c1.meets_at=c2.meets_at  );
```

Query 4: Find the names of faculty members who teach in every room in which some class is taught.

```
 SELECT f.fname,f.fid
                        FROM faculty f
                WHERE f.fid in ( SELECT fid FROM class
                        GROUP BY fid HAVING COUNT(*)=(SELECT COUNT(DISTINCT room) FROM class) );
```

Query 5: Find the names of the faculty members for whome the combined enrollment of the classes that they teach is less then five.

```
 SELECT DISTINCT f.fname
        FROM faculty f
        WHERE f.fid IN (  SELECT c.fid
                          FROM class c, enrolled e
                          WHERE c.cname = e.cname GROUP BY c.cname HAVING COUNT(c.cname)< 5 );
```