

Institute of Computer Technology
B. Tech Computer Science and Engineering
Subject: DBMS (2CSE301)
MIDSEM – 1
PRACTICAL-EXAM

Aim: Practical Definition

No.	Problem Definition	Marks																								
(01)	<p>Create 2 tables - person and contact for the database enrolment_branch as per the given schema. Also, Insert data as given at the end: person</p> <table> <tr> <td>id</td><td>Integer</td><td>Primary key</td></tr> <tr> <td>firstName</td><td>String</td><td>Not null</td></tr> <tr> <td>lastName</td><td>String</td><td>Not null</td></tr> <tr> <td>dob</td><td>Date</td><td></td></tr> </table> <p>contact</p> <table> <tr> <td>id</td><td>Integer</td><td>Primary key</td></tr> <tr> <td>person_id</td><td>Integer</td><td>Foreign key to id column of Person relation</td></tr> <tr> <td>contact_type</td><td>String</td><td>Default 'email' Should contain 'email', 'skype', 'fixed line', 'icq', 'mobile'</td></tr> <tr> <td>contact_value</td><td>String</td><td>Not null</td></tr> </table>	id	Integer	Primary key	firstName	String	Not null	lastName	String	Not null	dob	Date		id	Integer	Primary key	person_id	Integer	Foreign key to id column of Person relation	contact_type	String	Default 'email' Should contain 'email', 'skype', 'fixed line', 'icq', 'mobile'	contact_value	String	Not null	(4)
id	Integer	Primary key																								
firstName	String	Not null																								
lastName	String	Not null																								
dob	Date																									
id	Integer	Primary key																								
person_id	Integer	Foreign key to id column of Person relation																								
contact_type	String	Default 'email' Should contain 'email', 'skype', 'fixed line', 'icq', 'mobile'																								
contact_value	String	Not null																								

QUERY (Table 1 - person)

CREATE TABLE person(id INT PRIMARY KEY, firstName VARCHAR(20) NOT NULL, lastName VARCHAR(20) NOT NULL, dob DATE);

OUTPUT

localhost / 127.0.0.1 / enrolment

http://localhost/phpmyadmin/index.php?route=/database/sql&db=enrolment_branch

Server: 127.0.0.1 > Database: enrolment_branch

StructureSQLSearchQueryExportImportOperationsPrivilegesRoutinesEventsTriggersTrackingDesignerCentral columns

Show query box

MySQL returned an empty result set (i.e. zero rows). (Query took 0.1976 seconds.)

CREATE TABLE person(id INT PRIMARY KEY, firstName VARCHAR(20) NOT NULL, lastName VARCHAR(20) NOT NULL, dob DATE);

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

Console

RecentFavorites

Newbda_20162121023enrolment_branchNewpersonhr_bda_23information_schemamysqlperformance_schemaphpmyadminprac8_bda_20162121023prac9_20162121023sakilastudent_info_testuni_bda_23

localhost / 127.0.0.1 / enrolment

http://localhost/phpmyadmin/index.php?route=/database/sql&db=enrolment_branch

Server: 127.0.0.1 > Database: enrolment_branch

StructureSQLSearchQueryExportImportOperationsPrivilegesRoutinesEventsTriggersTrackingDesignerCentral columns

Show query box

Your SQL query has been executed successfully.

DESCRIBE person;

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

+ Options

Field	Type	Null	Key	Default	Extra
id	int(11)	NO	PRI	NULL	
firstName	varchar(20)	NO		NULL	
lastName	varchar(20)	NO		NULL	
dob	date	YES		NULL	

Query results operations

PrintCopy to clipboardCreate view

Bookmark this SQL query

Label: ☐ Let every user access this bookmark

Bookmark this SQL query

Console

RecentFavorites

Newbda_20162121023enrolment_branchNewpersonhr_bda_23information_schemamysqlperformance_schemaphpmyadminprac8_bda_20162121023prac9_20162121023sakilastudent_info_testuni_bda_23

QUERY (Table 2 - contact)

CREATE TABLE contact(id INT PRIMARY KEY,person_id INT, contact_type VARCHAR(20) DEFAULT 'email' CHECK(contact_type IN('email','skype','fixed line','icq','mobile')), contact_value VARCHAR(20) NOT NULL, FOREIGN KEY(person_id) REFERENCES person(id));

OUTPUT

Recent

Favorites

New

bda_20162121023

enrolment_branch

New

contact

person

hr_bda_23

information_schema

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performance_schema

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prac8_bda_20162121023

prac9_20162121023

sakila

student_info

test

uni_bda_23

Server: 127.0.0.1

Database: enrolment_branch

Structure

SQL

Search

Query

Export

Import

Operations

Privileges

Routines

Events

Triggers

Tracking

Designer

Central columns

Show query box

MySQL returned an empty result set (i.e. zero rows). (Query took 0.6793 seconds.)

```
CREATE TABLE contact(id INT PRIMARY KEY,person_id INT, contact_type VARCHAR(20) DEFAULT 'email' CHECK(contact_type IN('email','skype','fixed line','icq','mobile')), contact_value VARCHAR(20) NOT NULL, FOREIGN KEY(person_id) REFERENCES person(id));
```

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

Type here to search

localhost / 127.0.0.1 / enrolment_

http://localhost/phpmyadmin/index.php?route=/database/sql&db=enrolment_branch

Server: 127.0.0.1

Database: enrolment_branch

Structure

SQL

Search

Query

Export

Import

Operations

Privileges

Routines

Events

Triggers

Tracking

Designer

Central columns

Show query box

Your SQL query has been executed successfully.

DESCRIBE contact;

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

+ Options

Field	Type	Null	Key	Default	Extra
id	int(11)	NO	PRI	NULL	
person_id	int(11)	YES	MUL	NULL	
contact_type	varchar(20)	YES		email	
contact_value	varchar(20)	NO		NULL	

Query results operations

Print

Copy to clipboard

Create view

Bookmark this SQL query

Label:

☐ Let every user access this bookmark

Bookmark this SQL query

DATE VALUES: -

person

id	firstName	lastName	dob
1	Larry	Goldstein	1970-11-20
2	Lisa	Hamilton	1977-01-22
3	Kim	Goldstein	1975-12-23
4	James	de Winter	2011-06-01
5	Elias	Baker	1975-12-23
6	John	de Winter	1975-12-23

QUERY (Data of Table 1- person)

INSERT INTO `person`(`id`, `firstName`, `lastName`, `dob`) VALUES ('1','Larry','Goldstein','1970-11-20');
INSERT INTO `person`(`id`, `firstName`, `lastName`, `dob`) VALUES ('2','Lisa','Hamilton','1977-01-22');
INSERT INTO `person`(`id`, `firstName`, `lastName`, `dob`) VALUES ('3','Kim','Goldstein','1975-12-23');
INSERT INTO `person`(`id`, `firstName`, `lastName`, `dob`) VALUES ('4','James','de Winter','2011-06-01');
INSERT INTO `person`(`id`, `firstName`, `lastName`, `dob`) VALUES ('5','Elias','Baker','1975-12-23');
INSERT INTO `person`(`id`, `firstName`, `lastName`, `dob`) VALUES ('6','John','de Winter','1975-12-23');

OUTPUT (Table 1)

localhost / 127.0.0.1 / enrolment_

http://localhost/phpmyadmin/index.php?route=/table/sql&db=enrolment_branch&table=person

Server: 127.0.0.1 » Database: enrolment_branch » Table: person

Browse

Structure

SQL

Search

Insert

Export

Import

Privileges

Operations

Tracking

Triggers

Recent

Favorites

New

bda_20162121023

enrolment_branch

New

contact

person

hr_bda_23

information_schema

mysql

performance_schema

phpmyadmin

prac8_bda_20162121023

prac9_20162121023

sakila

student_info

test

uni_bda_23

Show query box

1 row inserted. (Query took 0.6904 seconds.)

INSERT INTO `person`(`id`, `firstName`, `lastName`, `dob`) VALUES ('1','Larry','Goldstein','1970-11-20');

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

1 row inserted. (Query took 0.0516 seconds.)

INSERT INTO `person`(`id`, `firstName`, `lastName`, `dob`) VALUES ('2','Lisa','Hamilton','1977-01-22');

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

1 row inserted. (Query took 0.0125 seconds.)

INSERT INTO `person`(`id`, `firstName`, `lastName`, `dob`) VALUES ('3','Kim','Goldstein','1975-12-23');

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

1 row inserted. (Query took 0.0119 seconds.)

INSERT INTO `person`(`id`, `firstName`, `lastName`, `dob`) VALUES ('4','James','de Winter','2011-06-01');

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

1 row inserted. (Query took 0.0128 seconds.)

INSERT INTO `person`(`id`, `firstName`, `lastName`, `dob`) VALUES ('5','Elias','Baker','1975-12-23');

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

1 row inserted. (Query took 0.0121 seconds.)

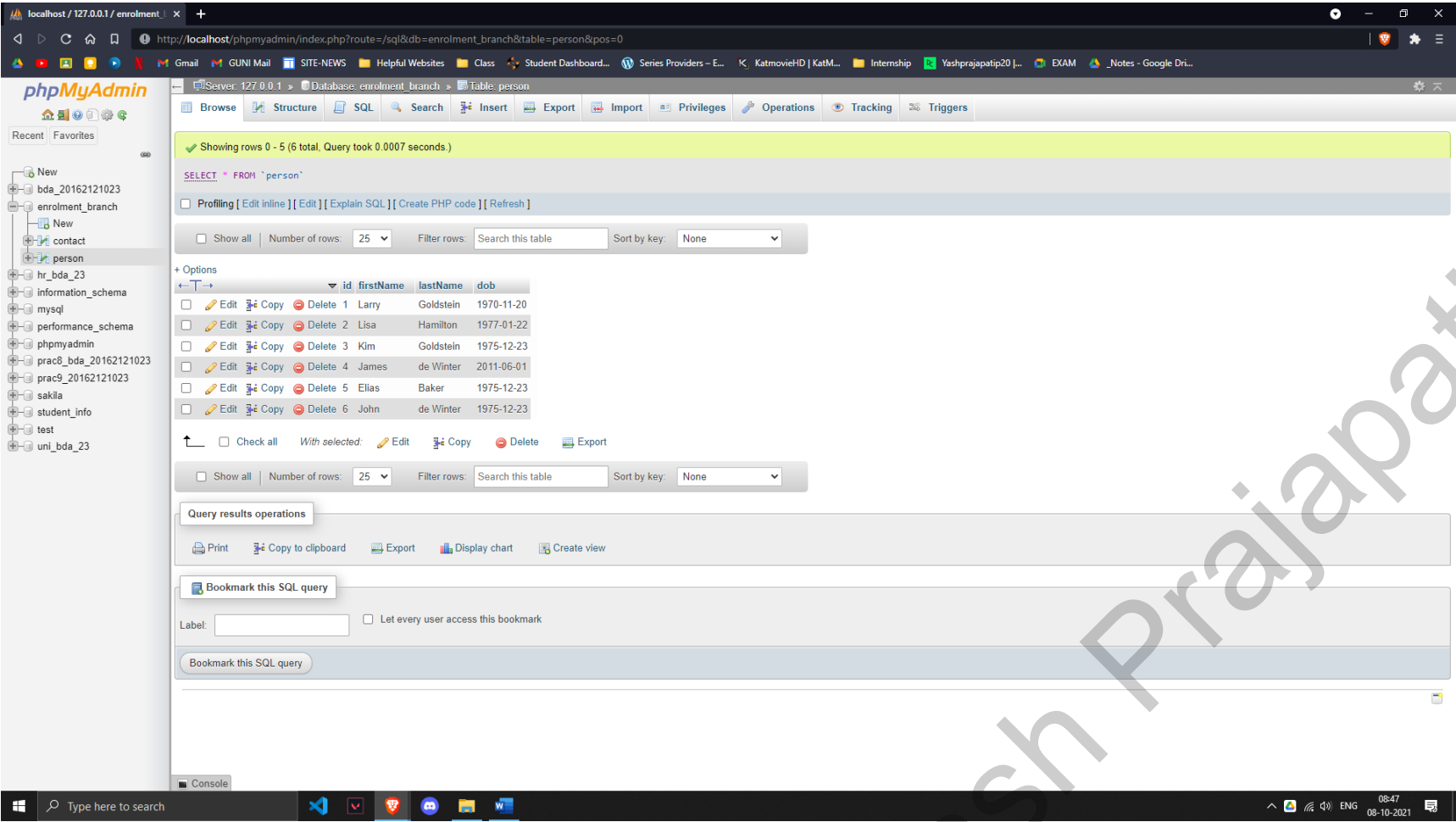
INSERT INTO `person`(`id`, `firstName`, `lastName`, `dob`) VALUES ('6','John','de Winter','1975-12-23');

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

Console

Type here to search

08:47 08-10-2021




contact

id	person_id	contact_type	contact_value
1	1	fixed line	555-0100
2	1	email	larry.goldstein@acme.xx
3	2	icq	12111
4	3	fixed line	5550101
5	3	mobile	10123444444
6	4		james.dewinter@acme.yy

QUERY (Data of Table 2- person)

```
INSERT INTO `contact`(`id`, `person_id`, `contact_type`, `contact_value`) VALUES ('1','1','fixed line','555-0100');
INSERT INTO `contact`(`id`, `person_id`, `contact_type`, `contact_value`) VALUES ('2','1','email','larry.goldstein@acme.xx');
INSERT INTO `contact`(`id`, `person_id`, `contact_type`, `contact_value`) VALUES ('3','2','icq','12111');
INSERT INTO `contact`(`id`, `person_id`, `contact_type`, `contact_value`) VALUES ('4','3','fixed line','555-0101');
INSERT INTO `contact`(`id`, `person_id`, `contact_type`, `contact_value`) VALUES ('5','3','mobile','10123444444');
INSERT INTO `contact`(`id`, `person_id`, `contact_value`) VALUES ('6','4','james.dewinter@acme.yy');
```

The screenshot shows the phpMyAdmin web interface in a browser. The address bar indicates the URL is http://localhost/phpmyadmin/index.php?route=/table/sql&db=enrolment_branch&table=contact. The left sidebar shows the database structure with 'enrolment_branch' selected, containing tables 'contact' and 'person'. The main panel shows the 'contact' table structure with columns 'id', 'person_id', 'contact_type', and 'contact_value'. Below the structure, a list of SQL queries and their execution results is displayed. The queries are INSERT statements for the 'contact' table. The results show successful insertions for rows 1 through 6, with a warning for row 1 stating '#1265 Data truncated for column 'contact_value' at row 1'. The interface includes a 'Show query box' button and a 'Console' tab at the bottom.



A screenshot of the Windows 10 taskbar search bar. The search bar is located on the left side of the taskbar and contains the text "Type here to search". To the right of the search bar, there is a button labeled "Console".

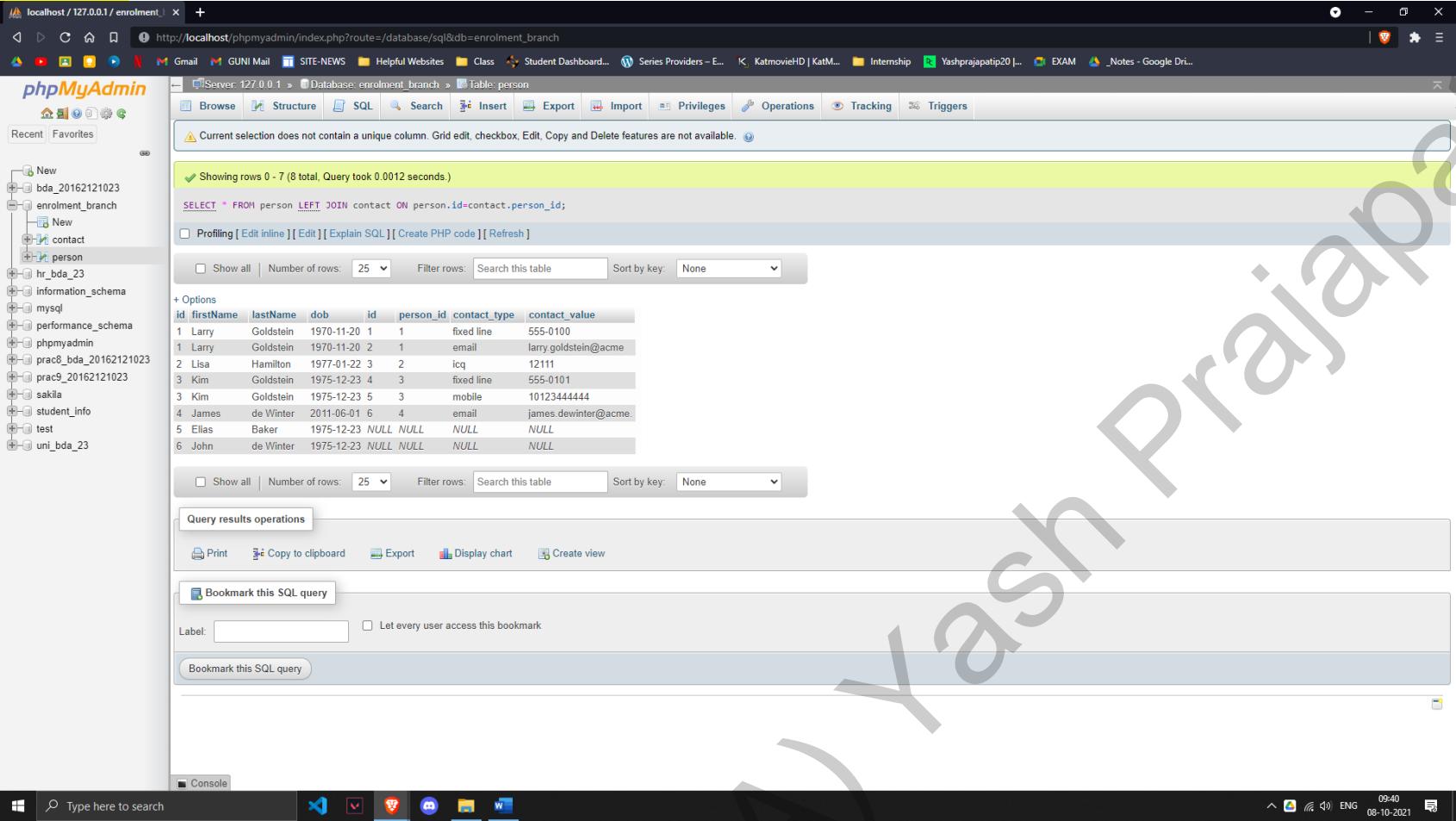
Questions: -

Q2. Display All the details of people whose contact details are not available. (2)

QUERY

SELECT * FROM person LEFT JOIN contact ON person.id=contact.person_id;

OUTPUT



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

Showing rows 0 - 7 (8 total, Query took 0.0012 seconds)

SELECT * FROM person LEFT JOIN contact ON person.id=contact.person_id;

Options

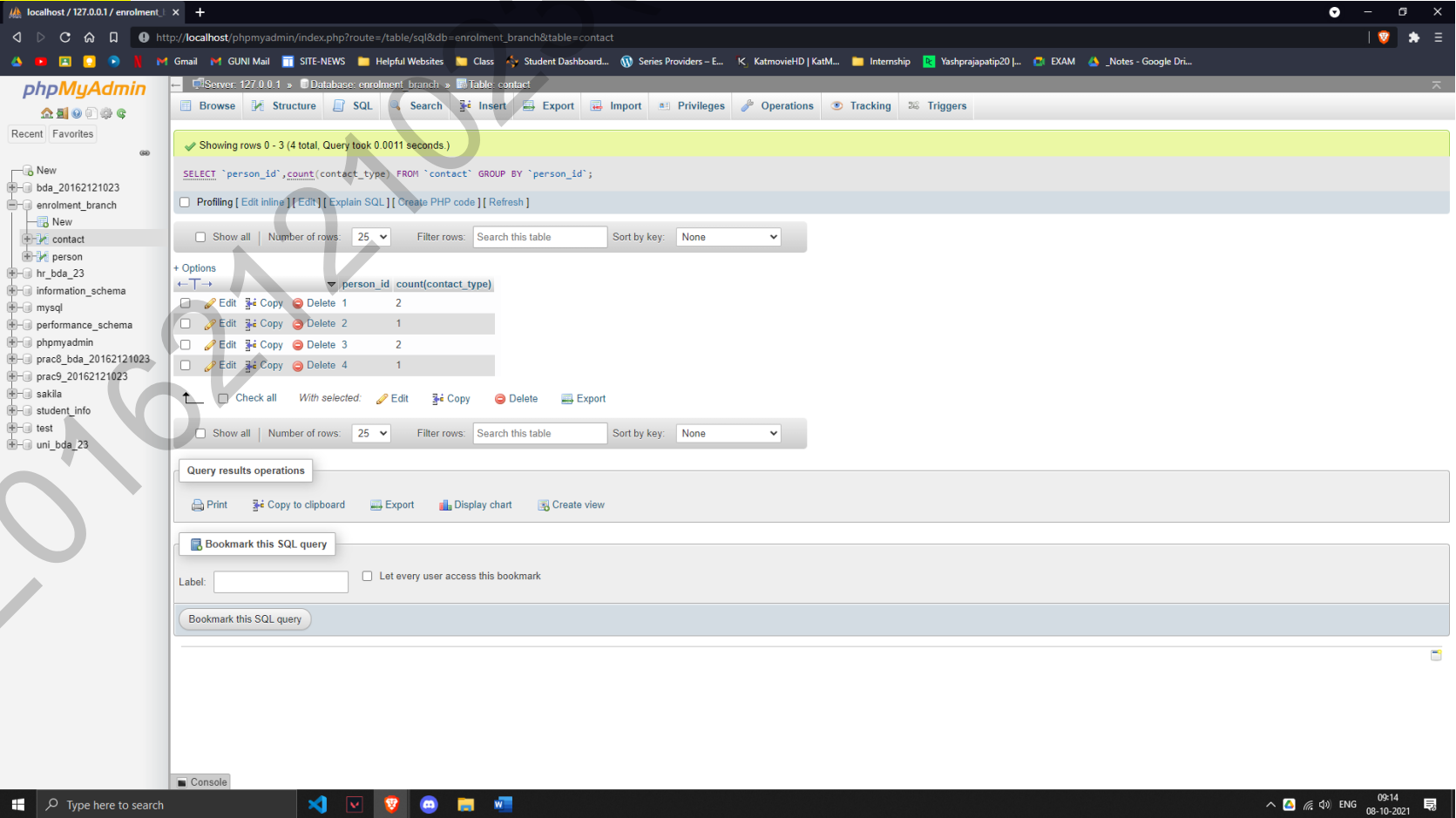
id	firstName	lastName	dob	id	person_id	contact_type	contact_value
1	Larry	Goldstein	1970-11-20	1	1	fixed line	555-0100
1	Larry	Goldstein	1970-11-20	2	1	email	larry.goldstein@acme
2	Lisa	Hamilton	1977-01-22	3	2	icq	12111
3	Kim	Goldstein	1975-12-23	4	3	fixed line	555-0101
3	Kim	Goldstein	1975-12-23	5	3	mobile	10123444444
4	James	de Winter	2011-06-01	6	4	email	james.dewinter@acme
5	Elias	Baker	1975-12-23	NULL	NULL	NULL	NULL
6	John	de Winter	1975-12-23	NULL	NULL	NULL	NULL

Q3. Display person_id and total count of his/her contact type. (2)

QUERY

SELECT `person_id`,count(contact_type) FROM `contact` GROUP BY `person_id`;

OUTPUT



Showing rows 0 - 3 (4 total, Query took 0.0011 seconds)

SELECT `person_id`,count(contact_type) FROM `contact` GROUP BY `person_id`;

Options

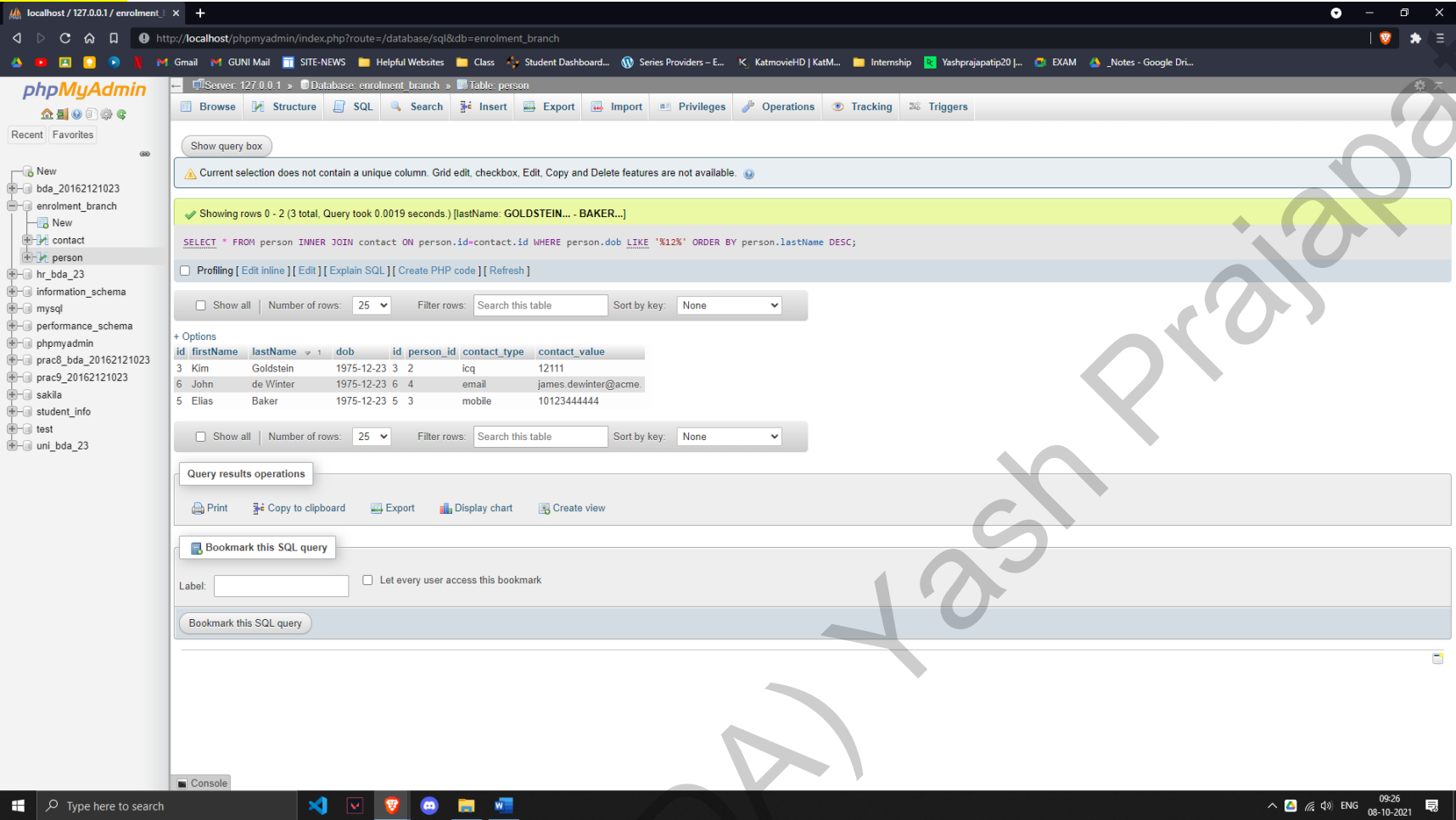
person_id	count(contact_type)
1	2
2	1
3	2
4	1

Q4. Display the contact details of the people who are born in December month in the descending order of their last name. (3)

QUERY

SELECT * FROM person INNER JOIN contact ON person.id=contact.id WHERE person.dob LIKE '%12%' ORDER BY person.lastName DESC;

OUTPUT



Q5. Rename the table contact to 'contact_info'. (1)

QUERY

ALTER TABLE contact RENAME TO contact_info;

OUTPUT

