```
mysql> # Joshi,Kunal
mysql> # Due Date:
                September 22, 2019
mysql> # Database Homework
mysql> # Section ISTE230.01
mysql> # Professor Habermas - Office (GOL) 2443
mysql> # EMAIL kj4732@rit.edu
mysql> select 'ISTE-230-01', 'HW03' as "Joshi, Kunal Deepak", curdate() as
"Todays Date";
select 'ISTE-230-01', 'HW03' as "Joshi, Kunal Deepak", curdate() as "Todays
Date"
_____
+----+
| ISTE-230-01 | Joshi, Kunal Deepak | Todays Date |
+----+
                            | 2019-09-20 |
| ISTE-230-01 | HW03
+----+
1 row in set (0.01 sec)
mysql> USE conman;
Database changed
mysql> SHOW TABLES;
SHOW TABLES
_____
| Tables in comman |
+----+
| contact info |
+----+
1 row in set (0.01 sec)
mysql> SELECT * FROM contact info\G
_____
SELECT * FROM contact info
firstName: Charlene
   middleInitial: NULL
       lastName: Reynolds
suffixDescription: NULL
titleDescription: Mrs.
       jobTitle: Assistant to Finance Director
      department: Finance
          email: creynolds@concor.com
           url: NULL
      IMaddress: charreynolds
     phoneNumber: 323-546-6834 ext.30
phoneDescription: work
       birthday: 1972-06-15
         notes: Very nice, but can make things difficult if you make
her angry
    companyName: Concor International Inc.
    addressLine1: 143 South Main Street
    addressLine2: NULL
          city: Los Angeles
  state province: CA
```

```
zip postalcode: 90012-3712
  country region: USA
      companyURL: www.concor.com
    companyPhone: 323-546-6834
********************* 2. row *****************
       firstName: Rachel
   middleInitial: NULL
        lastName: Woods
suffixDescription: NULL
titleDescription: Miss.
        jobTitle: NULL
      department: NULL
           email: goof@go.com
            url: NULL
       IMaddress: Goofy12
     phoneNumber: 585-532-4332
phoneDescription: cell
       birthday: 1985-05-06
          notes: Favorite color is purple
     companyName: NULL
    addressLine1: NULL
    addressLine2: NULL
           city: NULL
  state province: NULL
  zip postalcode: NULL
  country region: NULL
      companyURL: NULL
    companyPhone: NULL
firstName: Les
   middleInitial: M
       lastName: Nelson
suffixDescription: Ph.D.
titleDescription: Prof.
        jobTitle: Professor
      department: Business
          email: Imnbus@rit.edu
            url: NULL
       IMaddress: NULL
     phoneNumber: 585-475-0000
phoneDescription: work
        birthday: 1964-03-23
          notes: Hates when work is submitted late
     companyName: RIT
    addressLine1: Bldg.12
    addressLine2: 102 Lomb Memorial Drive
           city: Rochester
  state province: NY
  zip postalcode: 14623
  country region: USA
      companyURL: www.rit.edu
    companyPhone: NULL
firstName: Karson
   middleInitial: B
       lastName: Campbell
suffixDescription: NULL
titleDescription: Dr.
        jobTitle: Chief Resident
```

department: Pediatrics

```
email: kbc232@mvch.org
             url: NULL
       IMaddress: NULL
     phoneNumber: 585-544-1212
phoneDescription: home
        birthday: 1955-01-05
           notes: Wife: Molly Kids: Cassidy, Justine, and Cory.
     companyName: Mountain View Hospital
    addressLine1: NULL
    addressLine2: NULL
            city: NULL
   state province: NULL
   zip postalcode: NULL
   country region: NULL
      companyURL: NULL
    companyPhone: NULL
firstName: Kunal
   middleInitial: D
        lastName: Joshi
suffixDescription: MS
titleDescription: Mr.
        jobTitle: NULL
      department: NULL
           email: kj4732@rit.edu
             url: NULL
       IMaddress: NULL
     phoneNumber: NULL
phoneDescription: NULL
        birthday: NULL
           notes: NULL
     companyName: NULL
    addressLine1: NULL
    addressLine2: NULL
            city: NULL
   state province: NULL
   zip postalcode: NULL
   country_region: NULL
      companyURL: NULL
    companyPhone: NULL
************************** 6. row *******************
       firstName: Jacob
   middleInitial: P
        lastName: Jacobson
suffixDescription: Jr.
 titleDescription: Mr.
        jobTitle: Director
      department: Finance
           email: rjameson@concor.com
             url: www.concor.com/~rjames
       IMaddress: jpjacobson
     phoneNumber: 323-546-6834 ext.29
phoneDescription: work
        birthday: 1969-07-13
           notes: All meetings must be scheduled through Charlene
Reynolds
     companyName: Concor International Inc.
    addressLine1: 143 South Main Street
    addressLine2: NULL
            city: Los Angeles
```

```
state province: CA
   zip postalcode: 90012-3712
   country region: USA
      companyURL: www.concor.com
    companyPhone: 323-546-6834
6 rows in set (0.00 sec)
mysql> # Deleting self information from contact info table
mysql> delete from contact info where firstName like "Kunal";
delete from contact info where firstName like "Kunal"
Query OK, 1 row affected (0.04 sec)
mysql> # Checking remaining records in contact info table after deleting
self information record
mysql> SELECT * FROM contact info\G
_____
SELECT * FROM contact info
firstName: Charlene
    middleInitial: NULL
        lastName: Reynolds
suffixDescription: NULL
 titleDescription: Mrs.
        jobTitle: Assistant to Finance Director
      department: Finance
           email: creynolds@concor.com
             url: NULL
       IMaddress: charreynolds
     phoneNumber: 323-546-6834 ext.30
 phoneDescription: work
        birthday: 1972-06-15
           notes: Very nice, but can make things difficult if you make
her angry
     companyName: Concor International Inc.
    addressLine1: 143 South Main Street
    addressLine2: NULL
            city: Los Angeles
  state_province: CA
   zip postalcode: 90012-3712
   country region: USA
      companyURL: www.concor.com
    companyPhone: 323-546-6834
************************ 2. row ******************
       firstName: Rachel
    middleInitial: NULL
        lastName: Woods
suffixDescription: NULL
 titleDescription: Miss.
        jobTitle: NULL
      department: NULL
           email: goof@go.com
             url: NULL
       IMaddress: Goofy12
     phoneNumber: 585-532-4332
```

phoneDescription: cell

```
birthday: 1985-05-06
          notes: Favorite color is purple
     companyName: NULL
    addressLine1: NULL
    addressLine2: NULL
           city: NULL
  state province: NULL
  zip postalcode: NULL
  country region: NULL
      companyURL: NULL
    companyPhone: NULL
firstName: Les
   middleInitial: M
       lastName: Nelson
suffixDescription: Ph.D.
titleDescription: Prof.
        jobTitle: Professor
      department: Business
          email: Imnbus@rit.edu
            url: NULL
       IMaddress: NULL
     phoneNumber: 585-475-0000
phoneDescription: work
        birthday: 1964-03-23
          notes: Hates when work is submitted late
     companyName: RIT
    addressLine1: Bldg.12
    addressLine2: 102 Lomb Memorial Drive
           city: Rochester
  state_province: NY
  zip postalcode: 14623
  country region: USA
      companyURL: www.rit.edu
    companyPhone: NULL
firstName: Karson
   middleInitial: B
        lastName: Campbell
suffixDescription: NULL
titleDescription: Dr.
        jobTitle: Chief Resident
      department: Pediatrics
           email: kbc232@mvch.org
            url: NULL
       IMaddress: NULL
     phoneNumber: 585-544-1212
phoneDescription: home
        birthday: 1955-01-05
          notes: Wife: Molly Kids: Cassidy, Justine, and Cory.
     companyName: Mountain View Hospital
    addressLine1: NULL
    addressLine2: NULL
           city: NULL
  state province: NULL
  zip postalcode: NULL
  country region: NULL
      companyURL: NULL
    companyPhone: NULL
********************* 5. row ****************
```

```
firstName: Jacob
    middleInitial: P
         lastName: Jacobson
suffixDescription: Jr.
 titleDescription: Mr.
         jobTitle: Director
       department: Finance
            email: rjameson@concor.com
              url: www.concor.com/~rjames
      IMaddress: jpjacobson
phoneNumber: 323-546-6834 ext.29
 phoneDescription: work
        birthday: 1969-07-13
            notes: All meetings must be scheduled through Charlene
Reynolds
      companyName: Concor International Inc.
     addressLine1: 143 South Main Street
     addressLine2: NULL
            city: Los Angeles
   state province: CA
   zip postalcode: 90012-3712
   country region: USA
       companyURL: www.concor.com
     companyPhone: 323-546-6834
5 rows in set (0.00 sec)
mysql> \# Add attributes to the table
mysql> SOURCE D:\DATABASE\HW\HW03\Joshi attributes.sql
alter table contact info add column contactID varchar(9)
Query OK, 0 rows affected (0.09 sec)
Records: 0 Duplicates: 0 Warnings: 0
alter table contact info add column suffixID varchar(9)
Query OK, 0 rows affected (0.11 sec)
Records: 0 Duplicates: 0 Warnings: 0
alter table contact info add column titleID varchar(9)
Query OK, 0 rows affected (0.12 sec)
Records: 0 Duplicates: 0 Warnings: 0
_____
alter table contact info add column companyID varchar(9)
Query OK, 0 rows affected (0.10 sec)
Records: 0 Duplicates: 0 Warnings: 0
_____
alter table contact info add column phonetypeID varchar(9)
```

Query OK, 0 rows affected (0.11 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> # Verifying attributes added in contact_info table
mysql> desc contact info;

desc contact info

Field	Type	Null	Key	Default	Extra
firstName	 varchar(25)	+ YES	 	 NULL	
middleInitial	char(1)	YES		NULL	
lastName	varchar(25)	YES		NULL	
suffixDescription	varchar(5)	YES		NULL	
titleDescription	varchar(5)	YES		NULL	
jobTitle	varchar(40)	YES		NULL	
department	varchar(30)	YES		NULL	
email	varchar(35)	NO	PRI	NULL	
url	varchar(50)	YES		NULL	
IMaddress	varchar(25)	YES		NULL	
phoneNumber	varchar(25)	YES		NULL	
phoneDescription	varchar(10)	YES		NULL	
birthday	date	YES		NULL	
notes	varchar(255)	YES		NULL	
companyName	varchar(30)	YES		NULL	
addressLine1	varchar(40)	YES		NULL	
addressLine2	varchar(40)	YES		NULL	
city	varchar(20)	YES		NULL	
state_province	varchar(15)	YES		NULL	
zip_postalcode	varchar(10)	YES		NULL	
country_region	varchar(15)	YES		NULL	
companyÜRL	varchar(50)	YES		NULL	
companyPhone	varchar(12)	YES		NULL	
contactID	varchar(9)	YES		NULL	
suffixID	varchar(9)	YES		NULL	
titleID	varchar(9)	YES		NULL	
companyID	varchar(9)	YES		NULL	
phonetypeID	varchar(9)	YES		NULL	

28 rows in set (0.03 sec)

mysql> # Add constraints to the table
mysql> SOURCE D:\DATABASE\HW\HW03\Joshi_constraints.sql

alter table contact_info modify firstName varchar(20) NOT NULL

Query OK, 5 rows affected (0.08 sec)
Records: 5 Duplicates: 0 Warnings: 0

alter table contact_info modify lastName varchar(25) NOT NULL

Query OK, 0 rows affected (0.09 sec)
Records: 0 Duplicates: 0 Warnings: 0

alter table contact_info modify email varchar(30) NOT NULL

Query OK, 5 rows affected (0.07 sec)
Records: 5 Duplicates: 0 Warnings: 0

alter table contact_info modify phoneDescription varchar(10) NOT NULL

Query OK, 0 rows affected (0.09 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> # Verifying constraints added to contact_info table
mysql> desc contact info;

desc contact_info

Field	Type	Null	Key	Default	 Extra
firstName	varchar(20)	NO	+ 	NULL	+
middleInitial	char(1)	YES		NULL	
lastName	varchar(25)	NO		NULL	
suffixDescription	varchar(5)	YES		NULL	
titleDescription	varchar(5)	YES		NULL	
jobTitle	varchar(40)	YES		NULL	
department	varchar(30)	YES		NULL	
email	varchar(30)	NO	PRI	NULL	
url	varchar(50)	YES		NULL	
IMaddress	varchar(25)	YES		NULL	
phoneNumber	varchar(25)	YES		NULL	
phoneDescription	varchar(10)	NO		NULL	
birthday	date	YES		NULL	
notes	varchar(255)	YES		NULL	
companyName	varchar(30)	YES		NULL	
addressLine1	varchar(40)	YES		NULL	
addressLine2	varchar(40)	YES		NULL	
city	varchar(20)	YES		NULL	
state province	varchar(15)	YES		NULL	
zip postalcode	varchar(10)	YES		NULL	
country region	varchar(15)	YES		NULL	
companyURL	varchar(50)	YES		NULL	
companyPhone	varchar(12)	YES		NULL	
contactID	varchar(9)	YES		NULL	
suffixID	varchar(9)	YES		NULL	
titleID	varchar(9)	YES		NULL	
companyID	varchar(9)	YES		NULL	
phonetypeID	varchar(9)	YES		NULL	

28 rows in set (0.00 sec)

mysql> # Update the existing records in the table
mysql> SOURCE D:\DATABASE\HW\HW03\Joshi_update.sql

update contact_info set contactID=111, suffixID=1, titleID=1,

companyID=123, phonetypeID=1 where firstName like "Jacob"

```
Query OK, 1 row affected (0.03 sec)
Rows matched: 1 Changed: 1 Warnings: 0
update contact info set contactID=222, titleID =2, companyID=123,
phonetypeID=1 where firstName like "Charlene"
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
update contact info set contactID=333, titleID =5, companyID=456,
phonetypeID=2 where firstName like "Karson"
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
_____
update contact info set contactID=444, suffixID=2, titleID=4,
companyID=231, phonetypeID=1 where firstName like "Les"
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
update contact_info set contactID=555, titleID =3, phonetypeID=3 where
firstName like "Rachel"
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> \# Display first name, last name and the value of all attribute
values that were added to the table.
mysql> select firstName , lastName , contactID, suffixID, titleID,
companyID, phonetypeID from contact_info;
select firstName , lastName , contactID, suffixID, titleID, companyID,
phonetypeID from contact info
| firstName | lastName | contactID | suffixID | titleID | companyID |
phonetypeID |
----+
| Charlene | Reynolds | 222
                            | 123
                                                       | 1
| Rachel | Woods | 555
                                     | 3
                                             | NULL
                            | NULL
                                                       | 3
                            | 2
| 4
                                             | 231
                                                       | 1
| Karson | Campbell | 333
                                             | 456
                            | 2
| Jacob | Jacobson | 111 | 1 | 1 | 123 | 1
```

----+

5 rows in set (0.00 sec)

mysql> # Add primary key to the table (Composite Primary Key consisting phoneNumber, contactID). Before that dropping existing Primary Key on contact info table.

mysql> alter table contact_info DROP PRIMARY KEY;

alter table contact_info DROP PRIMARY KEY

Query OK, 5 rows affected (0.09 sec)
Records: 5 Duplicates: 0 Warnings: 0

mysql> SOURCE D:\DATABASE\HW\HW03\Joshi_pk.sql

alter table contact_info add CONSTRAINT PK_contact_info PRIMARY
KEY(phoneNumber,contactID)

Query OK, 0 rows affected (0.13 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc contact_info;

desc contact info

Field	+ Type	+ Null	+ Key	+ Default	+ Extra
	+	+	+	+	+
firstName	varchar(20)	NO		NULL	
middleInitial	char(1)	YES		NULL	l
lastName	varchar(25)	NO		NULL	
suffixDescription	varchar(5)	YES		NULL	
titleDescription	varchar(5)	YES		NULL	
jobTitle	varchar(40)	YES		NULL	
department	varchar(30)	YES		NULL	
email	varchar(30)	NO		NULL	
url	varchar(50)	YES		NULL	
IMaddress	varchar(25)	YES		NULL	
phoneNumber	varchar(25)	NO	PRI	NULL	
phoneDescription	varchar(10)	NO		NULL	
birthday	date	YES		NULL	
notes	varchar(255)	YES		NULL	
companyName	varchar(30)	YES		NULL	
addressLine1	varchar(40)	YES		NULL	
addressLine2	varchar(40)	YES		NULL	
city	varchar(20)	YES		NULL	
state_province	varchar(15)	YES		NULL	
zip_postalcode	varchar(10)	YES		NULL	
country_region	varchar(15)	YES		NULL	
companyURL	varchar(50)	YES		NULL	
companyPhone	varchar(12)	YES		NULL	
contactID	varchar(9)	NO	PRI	NULL	
suffixID	varchar(9)	YES		NULL	
titleID	varchar(9)	YES		NULL	
companyID	varchar(9)	YES		NULL	
phonetypeID	varchar(9)	YES		NULL	

+----+ 28 rows in set (0.00 sec) mysql> # Display first name, last name, contactID and phone number before deleting the records. mysql> SOURCE D:\DATABASE\HW\HW03\Joshi delete.sql _____ select firstName , lastName , contactID, phoneNumber from contact info +----+ | firstName | lastName | contactID | phoneNumber +----+ +----+ 5 rows in set (0.00 sec) delete from contact info where phoneNumber="585-544-1212" and contactID="333" Query OK, 1 row affected (0.01 sec) delete from contact info where phoneNumber="585-532-4332" and contactID="555" _____ Query OK, 1 row affected (0.27 sec) select firstName , lastName , contactID, phoneNumber from contact info +----+ | firstName | lastName | contactID | phoneNumber +----+

mysql> notee

3 rows in set (0.00 sec)