RIT	School of Information	iSchool

Homework 3
Adding records (tuples) to a table that contains a foreign key
Modifying the structure and content of a data

Due Date: Sunday September 22, 2019 @ 6 PM

Note: submissions must be made to the appropriate dropbox – DropBox will not be open until next Wednesday.

You must run your scripts you created for homework #2. Homework #2 you created the database Conman. This homework requires that you completed homework #2, thus, you have the structure of the contact_info table derived from homework #2. And you must have all the records inserted into this table contact_info that Homework #2 required. (You MUST have all the corrections to homework #2 fixed before you start this homework. Wait for the feedback from the TA on Homework #2 – before you start/turn in this homework #3) If you want to start early, come and see Jim Habermas in his office hours for immediate feedback on Homework #2.

Through your communications with the company that hired you to create CONMAN, a contact management database, you have learned that some changes need to be made to the structure of the database. These changes will cause existing records to have to be edited.

Start a log by (USE TEE) named **Yourlastname_HW3.txt** Turn this in the drop box.

These initial commands you can put into your first script if you want.

Initial commands at start up

```
# Lastname, Firstname                 This is a comment because it starts with # followed by a space
# Due Date:   September 22, 2019      This is a comment because it starts with # followed by a space
USE conman;
SHOW TABLES;
SELECT * FROM contact_info\G
```

Step 0: Delete yourself from the database.
To make the changes below easier, delete your name from the database (done in HW #2). Please do not create a script to carry out this step. Just execute the command from the keyboard.

Step 1: Add attributes to the table

In Appendix A, you will find the changes that are requested, please create ONE script to carry out all of the changes. Add a command to verify that the changes were made to the table.

The name of the script you create must follow the format '*yourlastname*_attributes.sql'.

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You will execute your script against the structure of the contact_info table derived from last week's homework (HW #2).

Step 2: Add constraints to the table

You will need to add constraints to enforce that values be entered for required attributes. The revised data dictionary in Appendix B has a double asterisk (**) by the constraints that need to be added. Please create ONE script that will accomplish all of these modifications. Add a command to verify that the changes were made to the table.

The name of the script you create must follow the format '*yourlastname*_constraints.sql'.

You will execute your script against the structure of the contact_info table after Step 1.

Step 3: Update the existing records in the table

You will create ONE script that will add information listed in Appendix C to the existing records within the contact_info table. Add a command to print the first name, last name and the value of all attribute values that were added to the table.

The name of the script used must follow the format '*yourlastname*_update.sql'.

You will execute your script against the structure of the contact_info table after Step 2.

Step 4: Add primary key to the table

You will need to add a constraint that makes the attributes phoneNumber and contactID the primary key of the contact_info table. Add a command to verify that the changes were made to the table.

The name of the script used must follow the format '*yourlastname_pk.*sql'.

You will execute your script against the structure of the contact_info table after Step 3.

Step 5: Delete records from the table

You will create ONE script that will delete the records for Karson Campbell and Rachel Woods using the primary key to each of these records. Add the command to print the first name, last name, contactID and phone number before and after deleting the records.

The name of the script used must follow the format '*yourlastname*_delete.sql'.

You will execute your script against the structure of the contact_info table after Step 4.

NOTEE

- Close log file **Yourlastname_HW3.txt**

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UPDATED tv_guide Add 6 or more records (**tuples**) to the table **play** and any appropriate new data to table **tvstation**. Please make changes to BOTH tables 1) play 2) tvstation

You will need to start with my one script tv.sql

For homework #3 second tee file - You are required to add 6 NEW rows of shows that you watch

(you can make up the data - you might not watch tv) into the play table.

in the database tv_guide Remember if you add a show in play, it MUST have a corresponding record in the datafile tvstation to reflect the tvstations that you watch.

I except students to add records to tvstation and/or update my existing records in tvstation if necessary.

After you have inserted 6 records in play create a new log file your LASTNAME_TV.txt
And type in the following COMMENTS and SELECT'S at the MySql> prompt

```
TEE  yourlastname_tv.txt

#    Lastname,  Firstname
#    ISTE 230.01
#    Get System date with the following select statement
```

SELECT 'ISTE-230-01', 'HW 03' as "{put your name here - Lastname, First} Habermas, James R.",CURDATE() as "Todays Date";

In the line above please do not put in Habermas, James R. insert your OWN Lastname, Firstname middle initial

```
USE tv_guide;

# Example of a select statement with "JOIN" – EXTRACT DATA FROM 2 TABLES

SELECT tvstation.channel, tvstation.url, play.name, play.playdate
          FROM tvstation
               JOIN play USING (channel)
                        ORDER BY tvstation.channel ASC;


SELECT * FROM PLAY;

SELECT * FROM tvstation;

NOTEE
```

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Step 5: Submitting your work

Include the log file first! Do NOT use a zip file. **Please use these exact names for your txt files and script files**

- yourlastname_HW3.txt
- *yourLASTNAME_TV.txt*
- *yourlastname*_attributes.sql
- *yourlastname*_constraints.sql
- *yourlastname*_update.sql
- *yourlastname*_pk.sql
- *yourlastname*_delete.sql
- *As discussed in class, it helps in the grading process if you convert both TEE files (files that end with the ext .txt) to PDF files. Please try to do that, and submit your TEE file as a PDF and also submit the TEE file as a txt file.*

Please attach all the files above in to the ASSIGNMENT drop box due date before the due date!!!!!!

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Appendix A: Requested changes to contact_info table

Change Number	Change
1	Add an attribute called contactID to the contact_info table. The attribute should be a variable length string capable of holding up to 9 characters. This attribute does not have to have a value.
2	Add an attribute called suffixID to the contact_info table. The attribute should be a variable length string capable of holding up to 9 characters. This attribute does not have to have a value.
3	Add an attribute to the contact_info table called titleID. The attribute should be a variable length string capable of holding up to 9 characters. This attribute does not have to have a value.
4	Add an attribute to the contact_info table called companyID. The attribute should be a variable length string capable of holding up to 9 characters. This attribute does not have to have a value.
5	Add an attribute to the contact_info table called phonetypeID. The attribute should be a variable length string capable of holding up to 9 characters. This attribute does not have to have a value.

Appendix B: See next page.

Appendix C. Updates to existing records in the contact_info table.

Attribute Name	**Record #1: Jacob P Jacobson**	**Record #2: Charlene Reynolds**	**Record #3: Karson B Campbell**	**Record #4: Les M Nelson**	**Record #5: Rachel Woods**
contactID	111	222	333	444	555
suffixID	1			2	
titleID	1	2	5	4	3
companyID	123	123	456	231	
phonetypeID	1	1	2	1	3

Appendix B. Revised data dictionary for contact_info table

Attribute Name	Datatype	Required	Description
firstName	varchar(20)	Y **	The first name of the contact.
middleInitial	char(1)	N	The middle initial of the contact.
lastName	varchar(25)	Y **	The last name of the contact.
suffixDescription	varchar(5)	N	A description of the suffix a contact may have after his/her name.
titleDescription	varchar(5)	N	The title the contact use before his/her name.
jobTitle	varchar(30)	N	The job title of the contact.
department	varchar(40)	N	The name of the department the contact works for within the company.
email	varchar(30)	Y **	The email address of the contact.
url	varchar(50)	N	The URL of the contact's webpage.
IMaddress	varchar(10)	N	The instant messaging address of the contact.
phoneNumber	varchar(25)	Y	A phone number for the contact.
phoneDescription	varchar(10)	Y **	A description of the phone number provided by the contact (ex. home, work, cell, fax, etc.).
birthday	date	N	The date of birth of the contact.
notes	varchar(255)	N	Any notes or comments on the contact.
companyname	varchar(30)	N	The employer of the contact.
addressLine1	varchar(50)	N	The street address of the company
addressLine2	varchar(50)	N	A second line for the street address of the company.
city	varchar(25)	N	The city the company is located in.
state_province	varchar(15)	N	The state or province the company is located in.
zip_postalcode	varchar(10)	N	The zip code or postal code of the company.
country_region	varchar(15)	N	The country or region the company is located in.
companyUrl	varchar(40)	N	The URL for the company's website.
companyPhone	varchar(12)	N	The main phone number for the company.
contactID	varchar(9)	Y	A unique code that identifies a person's information.
suffixID	varchar(9)	N	A code that identifies the suffix description used by a person.
titleID	varchar(9)	N	A code that identifies the title used by a person.
companyID	varchar(9)	N	A code that identifies the company that a contact works for.