```yaml
number headings: auto, first-level 1, max 6, contents ^toc, 1.01.
```

For your Lesson 2 Hands-On, you will be working with your new knowledge on SQL queries. This Hands-On **will** be graded, so be sure you complete all requirements. Please read through the below setup instructions before starting your project.

0.1. Table of contents

0.2. Setup

This Hands-On is structured into two parts, and each part may ask you to run multiple queries. After each query, please take a screenshot of the MySQL Workbench output and add it to a Word document (or an equivalent) and name this file `SQL-HandsOn2`. This way, you will be able to submit your answers to each part all at once.

You will utilize the `sakila` database that you have been using for this course within MySQL Workbench.

Now you are ready to get started! Good luck!

---

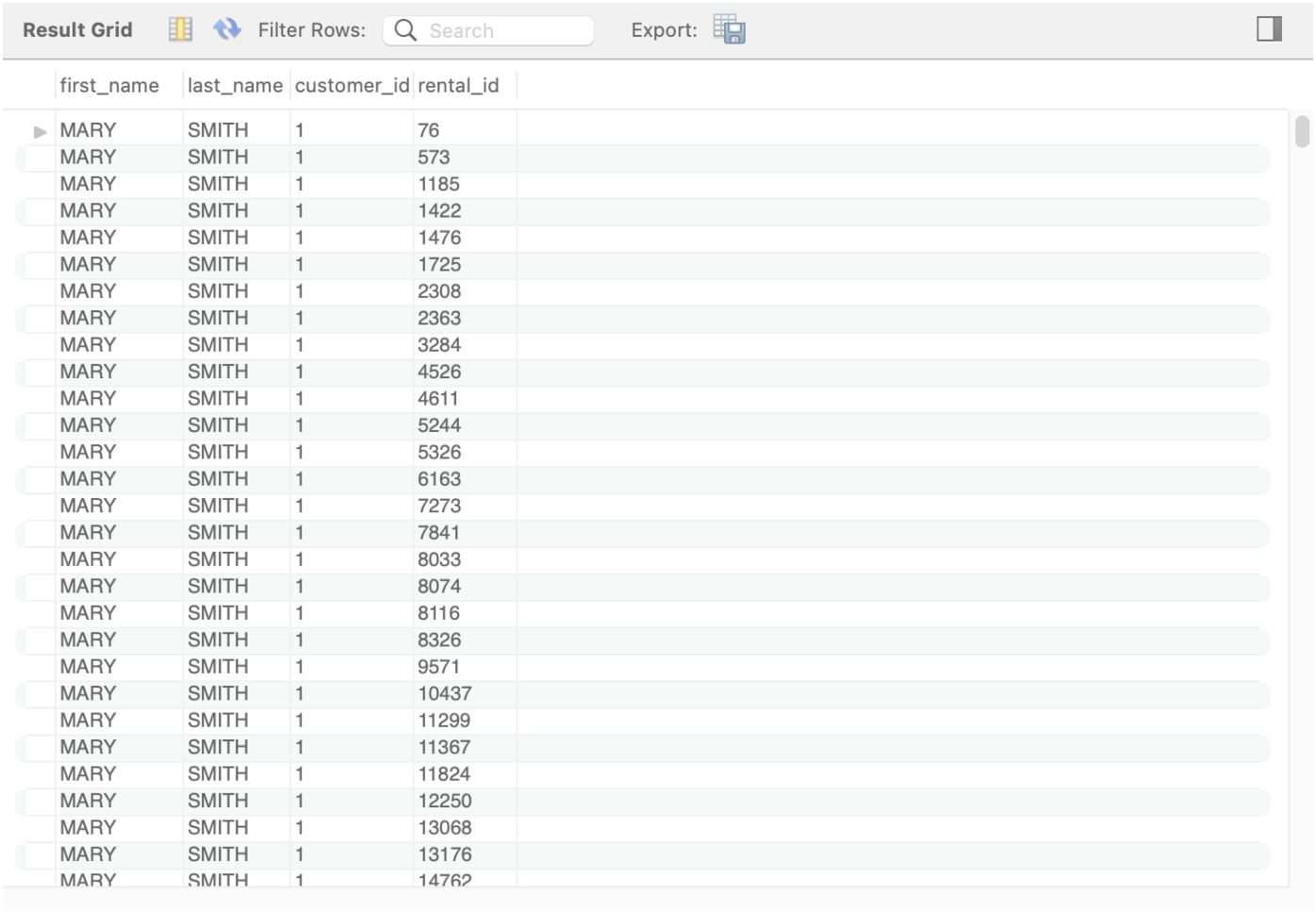
1. Part 1

Each of the below queries will include at least one `Join`. Read carefully and be sure to think about which columns you can use to `Join` the necessary tables.

Run the following queries:

1.1. Write a query to find the first and last name, customer ID and rental ID for customers who have rented a film.

```mysql
/* SELECT first_name, last_name, customer_id FROM sakila.customer
also need SELECT rental_id FROM sakila.rental
JOIN sakila.rental USING (customer_id) */

SELECT first_name, last_name, customer_id, rental_id
FROM sakila.customer
JOIN sakila.rental USING (customer_id)
```



first_name	last_name	customer_id	rental_id
MARY	SMITH	1	76
MARY	SMITH	1	573
MARY	SMITH	1	1185
MARY	SMITH	1	1422
MARY	SMITH	1	1476
MARY	SMITH	1	1725
MARY	SMITH	1	2308
MARY	SMITH	1	2363
MARY	SMITH	1	3284
MARY	SMITH	1	4526
MARY	SMITH	1	4611
MARY	SMITH	1	5244
MARY	SMITH	1	5326
MARY	SMITH	1	6163
MARY	SMITH	1	7273
MARY	SMITH	1	7841
MARY	SMITH	1	8033
MARY	SMITH	1	8074
MARY	SMITH	1	8116
MARY	SMITH	1	8326
MARY	SMITH	1	9571
MARY	SMITH	1	10437
MARY	SMITH	1	11299
MARY	SMITH	1	11367
MARY	SMITH	1	11824
MARY	SMITH	1	12250
MARY	SMITH	1	13068
MARY	SMITH	1	13176
MARY	SMITH	1	14762

1.2. Write a query that finds all films with actors that have an actor_id 5.

Mysql

```
/* First need to get only actor_id = 5

   actor_id, film_id => sakila.film_actor
   film_id, title => sakila.film */

SELECT actor_id, film_id, title
FROM sakila.film_actor
JOIN sakila.film USING (film_id)
WHERE actor_id = 5;
```

Result Grid | Filter Rows: Search | Export:

actor_id	film_id	title
5	19	AMADEUS HOLY
5	54	BANGER PINOCCHIO
5	85	BONNIE HOLOCAUST
5	146	CHITTY LOCK
5	171	COMMANDMENTS EXPRESS
5	172	CONEHEADS SMOOCHY
5	202	DADDY PITTSBURGH
5	203	DAISY MENAGERIE
5	286	ENOUGH RAGING
5	288	ESCAPE METROPOLIS
5	316	FIRE WOLVES
5	340	FRONTIER CABIN
5	369	GOODFELLAS SALUTE
5	375	GRAIL FRANKENSTEIN
5	383	GROOVE FICTION
5	392	HALL CASSIDY
5	411	HEAVENLY GUN
5	503	KRAMER CHOCOLATE
5	535	LOVE SUICIDES
5	571	METAL ARMAGEDDON
5	650	PACIFIC AMISTAD
5	665	PATTON INTERVIEW
5	687	POCUS PULP
5	730	RIDGEMONT SUBMARINE
5	732	RINGS HEARTBREAKERS
5	811	SMILE EARRING
5	817	SOLDIERS EVOLUTION
5	841	STAR OPERATION
5	865	SUNRISE LEAGUE

1.3. Write a query that lists out all information of every film along with the name of the language for each film, even if a language doesn't exist for that film.

Mysql

```
/* use the "wildcard" asterisk for all columns
   join all the films -- use RIGHT OUTER JOIN to get
   null values in language if language is RIGHT
   database
   common column is `film_id`*/

SELECT * FROM sakila.film
/* some other stuff I tried but had to eliminate to
   troubleshoot which direction I needed to go.
   JOIN sakila.film_actor USING (film_id)
   JOIN sakila.film_category USING (film_id)
   JOIN sakila.film_text USING (film_id) */
LEFT OUTER JOIN sakila.language USING (language_id);
```

Result Grid Filter Rows: Search Export:

language_id	film_id	title	description	release_year	original_language..
1	1	ACADEMY DINOSAUR	A Epic Drama of a Feminist And a Mad Scientist…	2006	NULL
1	2	ACE GOLDFINGER	A Astounding Epistle of a Database Administrat…	2006	NULL
1	3	ADAPTATION HOLES	A Astounding Reflection of a Lumberjack And a…	2006	NULL
1	4	AFFAIR PREJUDICE	A Fanciful Documentary of a Frisbee And a Lum…	2006	NULL
1	5	AFRICAN EGG	A Fast-Paced Documentary of a Pastry Chef An…	2006	NULL
1	6	AGENT TRUMAN	A Intrepid Panorama of a Robot And a Boy who…	2006	NULL
1	7	AIRPLANE SIERRA	A Touching Saga of a Hunter And a Butler who…	2006	NULL
1	8	AIRPORT POLLOCK	A Epic Tale of a Moose And a Girl who must Co…	2006	NULL
1	9	ALABAMA DEVIL	A Thoughtful Panorama of a Database Administ…	2006	NULL
1	10	ALADDIN CALENDAR	A Action-Packed Tale of a Man And a Lumberjac…	2006	NULL
1	11	ALAMO VIDEOTAPE	A Boring Epistle of a Butler And a Cat who must…	2006	NULL
1	12	ALASKA PHANTOM	A Fanciful Saga of a Hunter And a Pastry Chef…	2006	NULL
1	13	ALI FOREVER	A Action-Packed Drama of a Dentist And a Croc…	2006	NULL
1	14	ALICE FANTASIA	A Emotional Drama of a A Shark And a Databas…	2006	NULL
1	15	ALIEN CENTER	A Brilliant Drama of a Cat And a Mad Scientist w…	2006	NULL
1	16	ALLEY EVOLUTION	A Fast-Paced Drama of a Robot And a Compos…	2006	NULL
1	17	ALONE TRIP	A Fast-Paced Character Study of a Composer A…	2006	NULL
1	18	ALTER VICTORY	A Thoughtful Drama of a Composer And a Femi…	2006	NULL
1	19	AMADEUS HOLY	A Emotional Display of a Pioneer And a Technic…	2006	NULL
1	20	AMELIE HELLFIGHTERS	A Boring Drama of a Woman And a Squirrel wh…	2006	NULL
1	21	AMERICAN CIRCUS	A Insightful Drama of a Girl And a Astronaut wh…	2006	NULL
1	22	AMISTAD MIDSUMMER	A Emotional Character Study of a Dentist And a…	2006	NULL
1	23	ANACONDA CONFESSIONS	A Lacklusture Display of a Dentist And a Dentist…	2006	NULL
1	24	ANALYZE HOOSIERS	A Thoughtful Display of a Explorer And a Pastry…	2006	NULL
1	25	ANGELS LIFE	A Thoughtful Display of a Woman And a Astrona…	2006	NULL
1	26	ANNIE IDENTITY	A Amazing Panorama of a Pastry Chef And a B…	2006	NULL
1	27	ANONYMOUS HUMAN	A Amazing Reflection of a Database Administrat…	2006	NULL
1	28	ANTHEM LUKE	A Touching Panorama of a Waitress And a Wom…	2006	NULL
1	29	ANTITRUST TOMATOES	A Fateful Yarn of a Womanizer And a Feminist…	2006	NULL
1	30	ANYTHING SAVANNAH	A Epic Story of a Pastry Chef And a Woman wh…	2006	NULL
1	31	APACHE DIVINE	A Awe-Inspiring Reflection of a Pastry Chef And…	2006	NULL

1.4. Write a query that lists out the title of films and the name of the actors who starred in those films. Additionally, only list films that starred artists whose first names start with a vowel.

Mysql

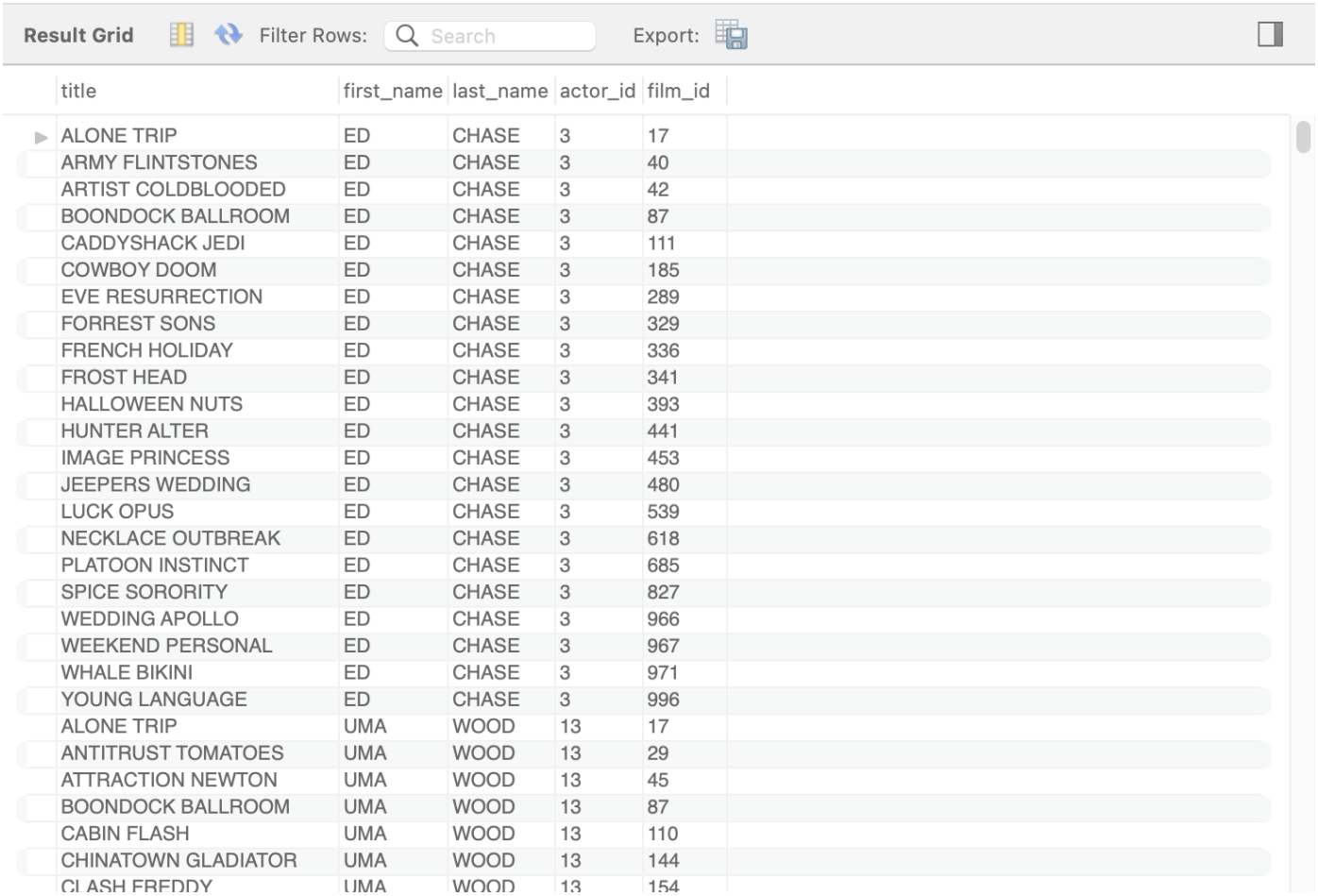
```
/* first query:

   NEED title, film_id FROM sakila.film
   NEED film_id, actor_id  FROM sakila.film_actor
   NEED actor_id, first_name, last_name FROM
   sakila.actor
   Overlap: film_id > actor_id */*

SELECT title, first_name, last_name
FROM sakila.film
JOIN sakila.film_actor USING (film_id)
JOIN sakila.actor USING (actor_id)
```

Result Grid | Filter Rows: Search | Export:

title	first_name	last_name
ACADEMY DINOSAUR	PENELOPE	GUINESS
ANACONDA CONFESSIONS	PENELOPE	GUINESS
ANGELS LIFE	PENELOPE	GUINESS
BULWORTH COMMANDME...	PENELOPE	GUINESS
CHEAPER CLYDE	PENELOPE	GUINESS
COLOR PHILADELPHIA	PENELOPE	GUINESS
ELEPHANT TROJAN	PENELOPE	GUINESS
GLEAMING JAWBREAKER	PENELOPE	GUINESS
HUMAN GRAFFITI	PENELOPE	GUINESS
KING EVOLUTION	PENELOPE	GUINESS
LADY STAGE	PENELOPE	GUINESS
LANGUAGE COWBOY	PENELOPE	GUINESS
MULHOLLAND BEAST	PENELOPE	GUINESS
OKLAHOMA JUMANJI	PENELOPE	GUINESS
RULES HUMAN	PENELOPE	GUINESS
SPLASH GUMP	PENELOPE	GUINESS
VERTIGO NORTHWEST	PENELOPE	GUINESS
WESTWARD SEABISCUIT	PENELOPE	GUINESS
WIZARD COLDBLOODED	PENELOPE	GUINESS
ADAPTATION HOLES	NICK	WAHLB...
APACHE DIVINE	NICK	WAHLB...
BABY HALL	NICK	WAHLB...
BULL SHAWSHANK	NICK	WAHLB...
CHAINSAW UPTOWN	NICK	WAHLB...
CHISUM BEHAVIOR	NICK	WAHLB...
DESTINY SATURDAY	NICK	WAHLB...
DRACULA CRYSTAL	NICK	WAHLB...
FIGHT JAWBREAKER	NICK	WAHLB...
FLASH WARS	NICK	WAHLB...
GILBERT PELICAN	NICK	WAHLB...
GOODFELLAS SALUTE	NICK	WAHLB

Mysql

```
/* second query:

   NEED title, film_id FROM sakila.film
   NEED film_id, actor_id  FROM sakila.film_actor
   NEED actor_id, first_name, last_name FROM
   sakila.actor

   Overlap: film_id > actor_id

   Testing out leaving off the columns I'm using for
   joins in the final output.

   Using IN() to look for vowels a, e, i, o, u, y */

SELECT title, first_name, last_name, actor_id, film_id
FROM sakila.film
JOIN sakila.film_actor USING (film_id)
JOIN sakila.actor USING (actor_id)
WHERE first_name LIKE "A%"
OR first_name LIKE "E%"
OR first_name LIKE "I%"
OR first_name LIKE "O%"
OR first_name LIKE "U%"
OR first_name LIKE "Y%";
```



Result Grid Filter Rows: Search Export:

title	first_name	last_name	actor_id	film_id
ALONE TRIP	ED	CHASE	3	17
ARMY FLINTSTONES	ED	CHASE	3	40
ARTIST COLDBLOODED	ED	CHASE	3	42
BOONDOCK BALLROOM	ED	CHASE	3	87
CADDYSHACK JEDI	ED	CHASE	3	111
COWBOY DOOM	ED	CHASE	3	185
EVE RESURRECTION	ED	CHASE	3	289
FORREST SONS	ED	CHASE	3	329
FRENCH HOLIDAY	ED	CHASE	3	336
FROST HEAD	ED	CHASE	3	341
HALLOWEEN NUTS	ED	CHASE	3	393
HUNTER ALTER	ED	CHASE	3	441
IMAGE PRINCESS	ED	CHASE	3	453
JEEPERS WEDDING	ED	CHASE	3	480
LUCK OPUS	ED	CHASE	3	539
NECKLACE OUTBREAK	ED	CHASE	3	618
PLATOON INSTINCT	ED	CHASE	3	685
SPICE SORORITY	ED	CHASE	3	827
WEDDING APOLLO	ED	CHASE	3	966
WEEKEND PERSONAL	ED	CHASE	3	967
WHALE BIKINI	ED	CHASE	3	971
YOUNG LANGUAGE	ED	CHASE	3	996
ALONE TRIP	UMA	WOOD	13	17
ANTITRUST TOMATOES	UMA	WOOD	13	29
ATTRACTION NEWTON	UMA	WOOD	13	45
BOONDOCK BALLROOM	UMA	WOOD	13	87
CABIN FLASH	UMA	WOOD	13	110
CHINATOWN GLADIATOR	UMA	WOOD	13	144
CLASH FREDDY	UMA	WOOD	13	154

2. Part 2

Below is a real-life scenario. Please read this scenario and run the appropriate queries needed.

You have just been hired as a Data Analyst for a company that rents films to customers. They would like an inventory list of films that were rented for more than $4.99.

Tip!
Pay close attention to the column names and give them unique names if a column name is repeated.

```
/*
title (sakila.film)
film_id (sakila.film) => film_id (sakila.inventory)
inventory_id (sakila.inventory) => inventory_id (sakila.rental)
rental_id (sakila.rental) => rental_id (sakila.payment)
amount (sakila.payment)
WHERE amount > 4.99
*/

SELECT title, film_id, inventory_id, rental_id, amount
FROM sakila.film
JOIN sakila.inventory USING (film_id)
JOIN sakila.rental USING (inventory_id)
JOIN sakila.payment USING (rental_id)
WHERE amount > 4.99
ORDER BY
        amount DESC,
```

```
    title,
    rental_id;
```

Result Grid | Filter Rows: Search | Export:

title	film_id	inventory_id	rental_id	amount
FLINTSTONES HAPPINESS	324	1480	14763	11.99
MIDSUMMER GROUNDHOG	575	2625	3973	11.99
MINE TITANS	580	2649	4383	11.99
SCORPION APOLLO	771	3520	8831	11.99
SCORPION APOLLO	771	3524	16040	11.99
SHOW LORD	791	3627	106	11.99
STING PERSONAL	846	3871	14759	11.99
TIES HUNGER	889	4077	11479	11.99
TRAP GUYS	908	4176	15415	11.99
VIRTUAL SPOILERS	946	4343	2166	11.99
AMERICAN CIRCUS	21	103	135	10.99
AMERICAN CIRCUS	21	103	6793	10.99
AMERICAN CIRCUS	21	105	11257	10.99
AMERICAN CIRCUS	21	104	12667	10.99
AUTUMN CROW	46	208	2306	10.99
BACKLASH UNDEFEATED	48	214	13263	10.99
BEAST HUNCHBACK	60	270	5872	10.99
▶ BEAST HUNCHBACK	60	270	15290	10.99
BEHAVIOR RUNAWAY	65	288	1718	10.99
BEHAVIOR RUNAWAY	65	289	7470	10.99
BILKO ANONYMOUS	71	319	6991	10.99
BILKO ANONYMOUS	71	316	7904	10.99
BILKO ANONYMOUS	71	318	10361	10.99
BILKO ANONYMOUS	71	318	15226	10.99
BRIGHT ENCOUNTERS	98	443	3957	10.99
CARIBBEAN LIBERTY	120	553	3830	10.99
CARIBBEAN LIBERTY	120	552	11086	10.99
CARIBBEAN LIBERTY	120	553	14327	10.99
CARIBBEAN LIBERTY	120	551	15425	10.99
CASUALTIES ENCINO	126	578	860	10.99
CASUALTIES ENCINO	126	579	7503	10.99
DAUGHTER MADIGAN	214	961	15008	10.99
DOORS PRESIDENT	243	1090	3272	10.99
FLASH WARS	321	1469	8886	10.99
FLINTSTONES HAPPINESS	324	1484	1301	10.99
FLINTSTONES HAPPINESS	324	1481	8557	10.99

	FLINTSTONES HAPPINESS	324	1482	9338	10.99
	FOOL MOCKINGBIRD	327	1496	11503	10.99
	FOOL MOCKINGBIRD	327	1494	12753	10.99
	FOOL MOCKINGBIRD	327	1492	14024	10.99
	GARDEN ISLAND	350	1598	10776	10.99
	HUSTLER PARTY	444	2041	8811	10.99
	HUSTLER PARTY	444	2046	9178	10.99

3. When Finished

Be sure to zip and submit your `SQL-HandsOn2` Word document when finished! You will not be able to re-submit, so be sure all necessary screenshots to each part are located within this document.