

# Unit 08 Problem Set Submission Form

## Overview

Your Name	Hongdi Li
Your SU Email	hli248@syr.edu

## Instructions

Put your name and SU email at the top. Answer these questions all from the lab. When asked to include screenshots, please follow the screen shot guidelines from the first lab.

Remember as you complete the problem sets it is not only about getting it right / correct. We will discuss the answers in class so it's important to articulate anything you would like to contribute to the discussion in your answer:

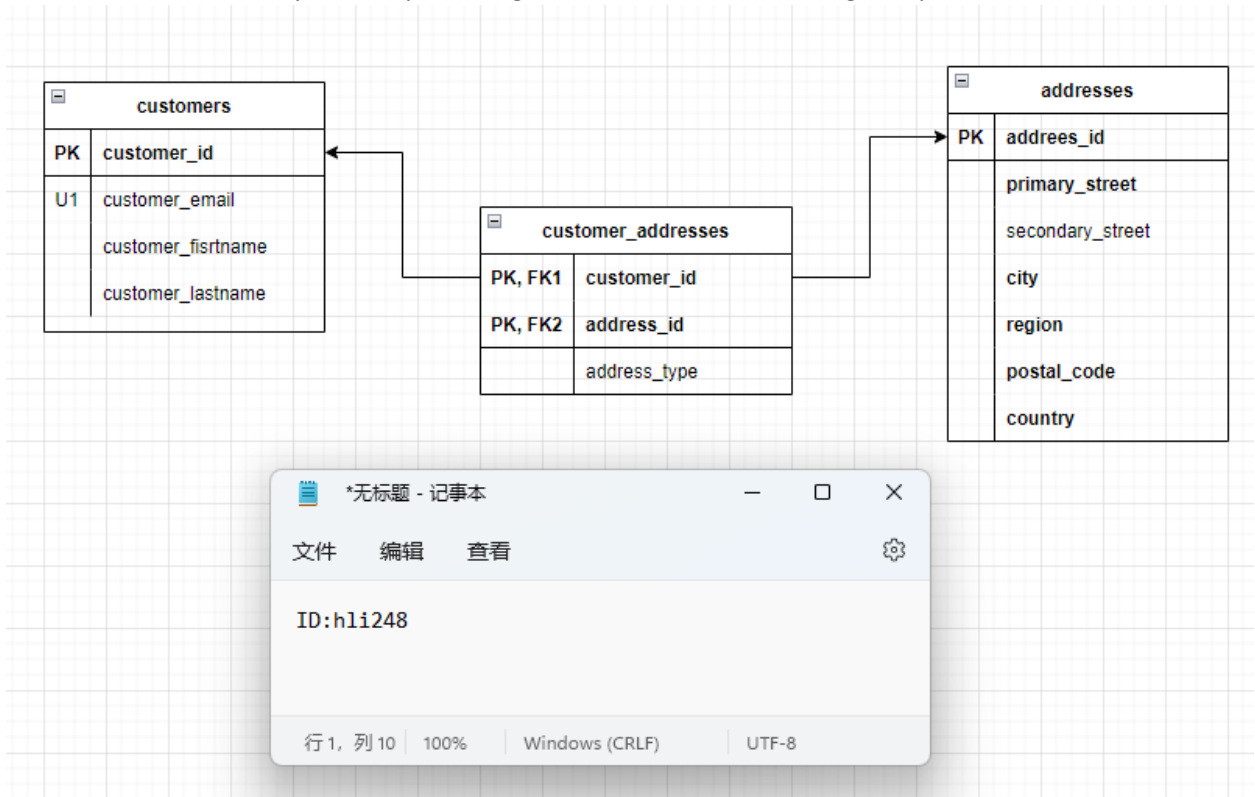
- If you feel the question is vague, include any assumptions you've made.
- If you feel the answer requires interpretation or justification provide it.
- If you do not know the answer to the question, articulate what you tried and how you are stuck.

This how you receive credit for answering questions which might not be correct.

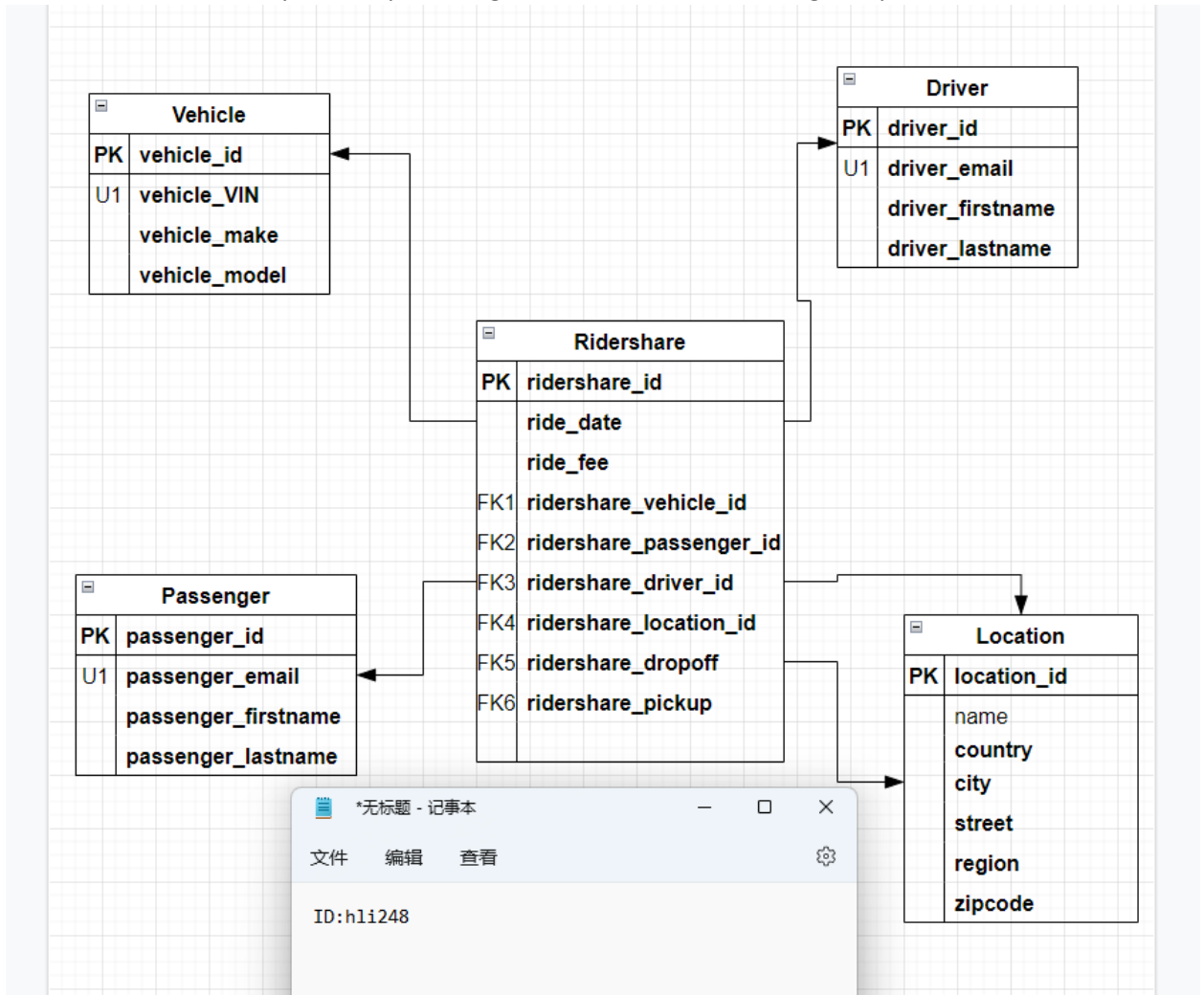
## Questions

Answer these questions using the problem set submission template. You will need to provide a screen shot for each answer. Please follow the guidelines for submitting a screenshot.

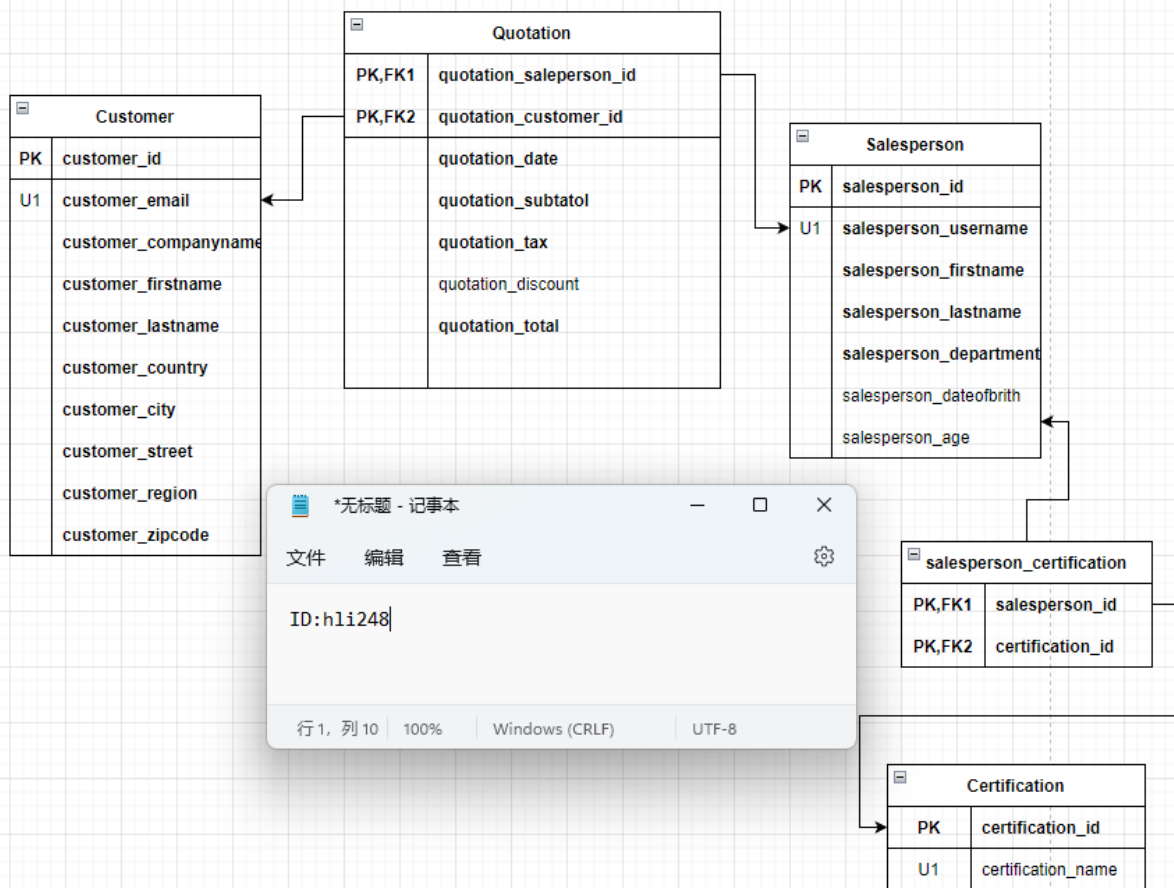
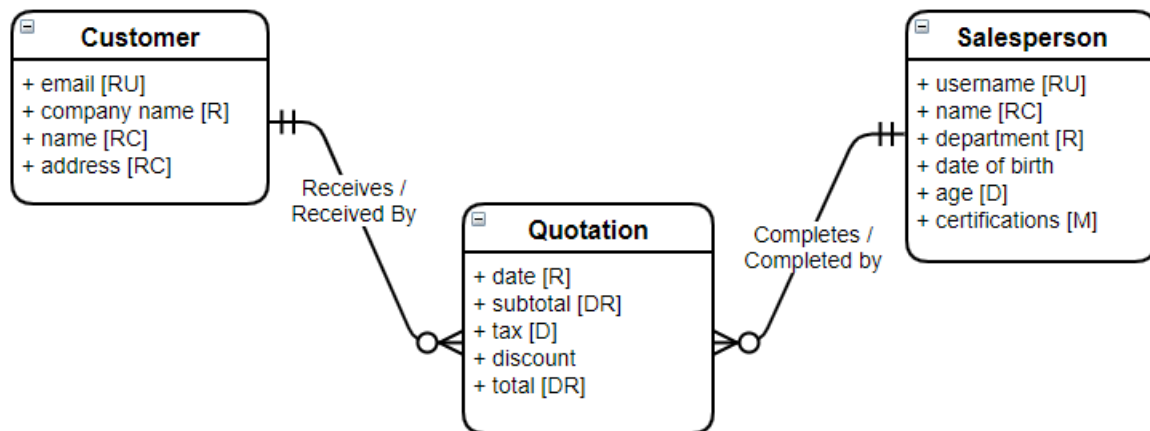
1. Provide a screenshot of your completed logical model from Walkthrough Step 2.



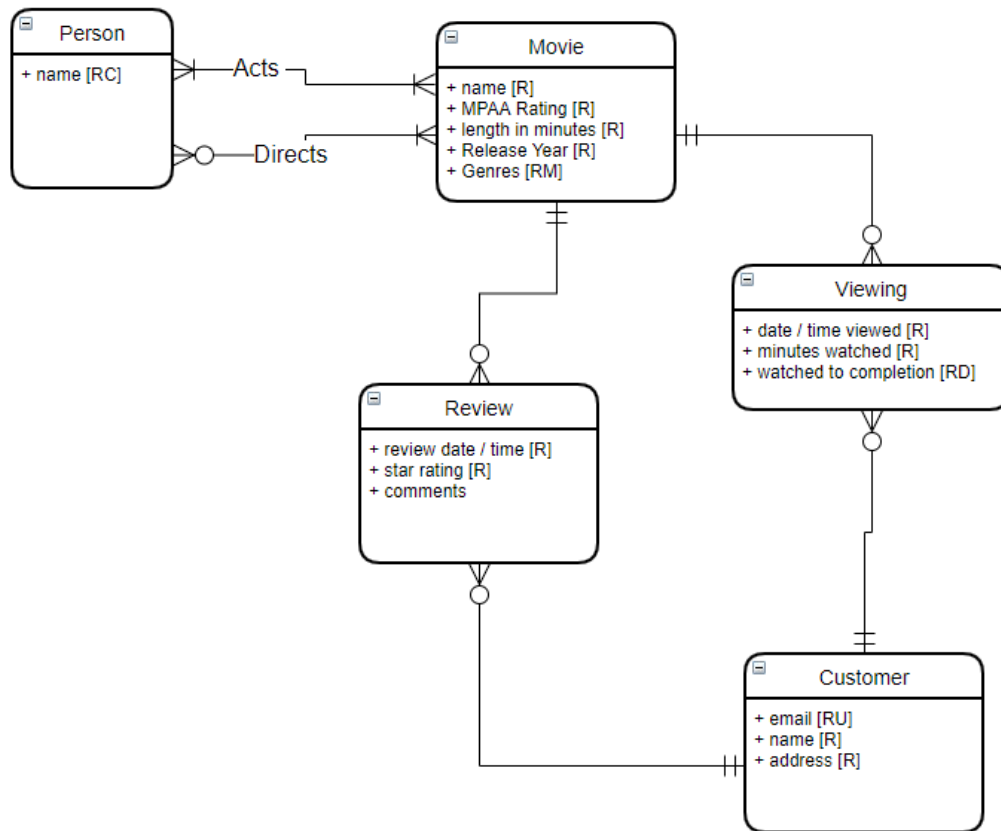
2. Provide a screenshot of your completed logical model from Walkthrough Step 3.

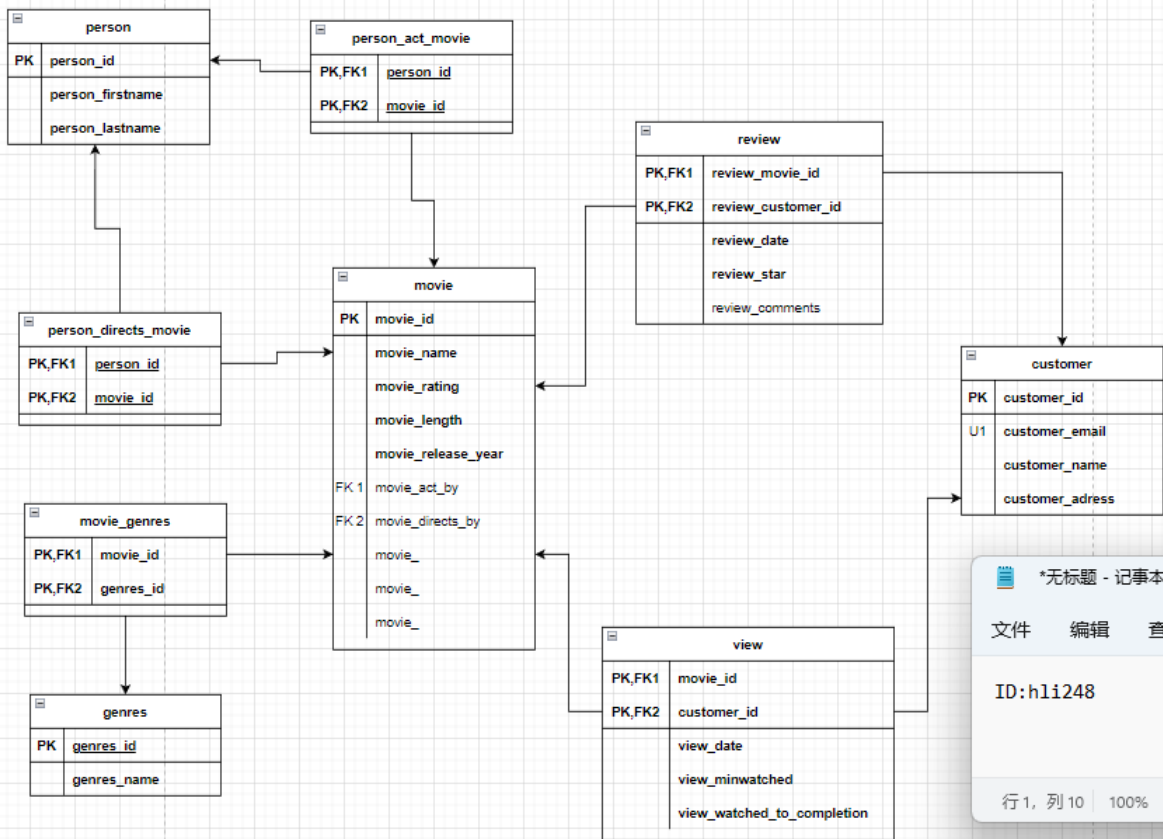


3. Map this conceptual model to a logical model.



4. Map this conceptual Model to a logical Model





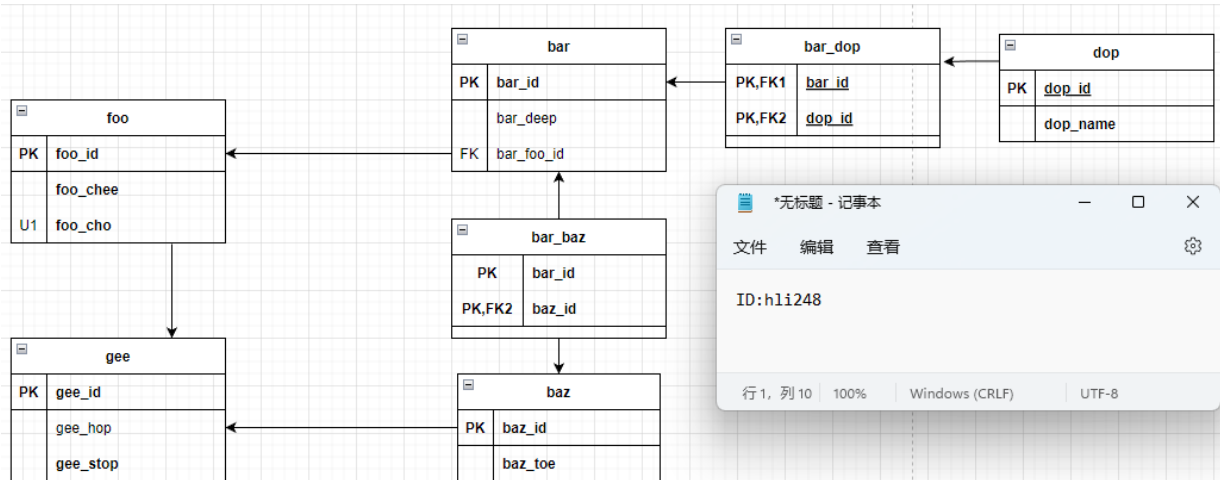
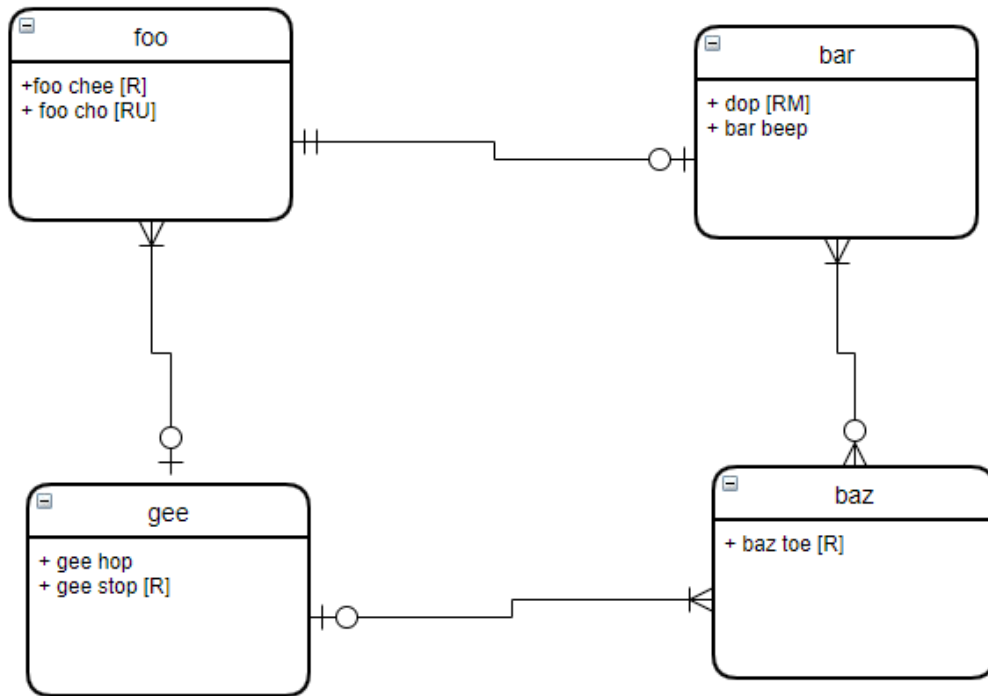
\*无标题 - 记事本

文件 编辑 查看

ID:h1i248

行 1, 列 10 100%

5. Map this conceptual model to a logical data model



6. Write an SQL Up/Down script to create the tables, keys and constraints for the logical model you created in question 1. Create the tables first with table constraints. Then alter the tables and add the FK constraints. The down part of your script should do this in reverse.

```

1  ✓ if not exists(select * from sys.databases where name='lab8')
2      create database lab8
3      GO
4
5      use lab8
6      -- DOWN
7      --hli248
8  ✓ if exists(select * from INFORMATION_SCHEMA.TABLE_CONSTRAINTS
9      where CONSTRAINT_NAME='fk_customer_address_a_id')
10     alter table customer_addresses drop CONSTRAINT fk_customer_address_a_id
11
12  ✓ if exists(select * from INFORMATION_SCHEMA.TABLE_CONSTRAINTS
13      where CONSTRAINT_NAME='fk_customer_address_c_id')
14     alter table customer_addresses drop CONSTRAINT fk_customer_address_c_id
15
16     drop table if exists customer_addresses
17     drop table if exists addresses
18     drop table if exists customers
19     -- UP Metadata
20     --hli248
21  ✓ create table customers (
22      customer_id int IDENTITY not NULL,
23      customer_email varchar(50) not NULL,
24      customer_firstname varchar(50) not NULL,
25      customer_lastname varchar(50) not NULL,
26
27      CONSTRAINT pk_customer_id primary key (customer_id),
28      CONSTRAINT u_customer_email UNIQUE (customer_email)
29  )
30
31  ✓ create table addresses(
32      address_id int IDENTITY not NULL,
33      primary_street varchar(50) not null,
34      secondary_street varchar(50),
35      city varchar(50) not null,
36      region varchar(50) not null,
37      postal_code varchar(50) not null,
38      country varchar(50) not null,
39
40      CONSTRAINT pk_address_id PRIMARY key(address_id)
41  )
42
43  ✓ create table customer_addresses (
44      customer_id int not NULL,
45      address_id int not NULL,
46      address_type varchar(50),
47
48      CONSTRAINT pk_customer_address_id primary key (customer_id,address_id)
49  )
50  --

```



```

50  ✓ alter table customer_addresses
51  ✓      add CONSTRAINT fk_customer_address_c_id FOREIGN key (customer_id)
52  ✓      REFERENCES customers(customer_id)
53  ✓ alter table customer_addresses
54  ✓      add CONSTRAINT fk_customer_address_a_id FOREIGN key (address_id)
55  ✓      REFERENCES addresses(address_id)
56  -- UP Data
57  --hli248
58  ✓ insert into customers
59  ✓     (customer_email,customer_firstname,customer_lastname)
60  ✓     values
61  ✓     ('hli248@syr.edu','Hongdi','Li'),
62  ✓     ('123@syr.edu','Hardi','Li'),
63  ✓     ('345@syr.edu','HHH','Lee')
64
65  ✓ insert into addresses
66  ✓     (primary_street,secondary_street,city,region,postal_code,country)
67  ✓     VALUES
68  ✓     ('119 diana ave',NULL,'Syracuse','NY','13210','US'),
69  ✓     ('2120 cowell blvd','111 apt','Davis','CA','95618','US'),
70  ✓     ('10095 colima rd',NULL,'LA','CA','94536','US')
71
72  ✓ insert into customer_addresses
73  ✓     (customer_id,address_id,address_type)
74  ✓     values
75  ✓     (1,1,'type-c'),
76  ✓     (2,2,'type-b'),
77  ✓     (3,3,'type-1')
78
79
80  -- Verify
81  --hli248
82  select * from customers
83  select * from addresses
84  select * from customer_addresses
85

```

	customer_id ▾	customer_email ▾	customer_firstname ▾	customer_lastname ▾
1	1	h1i248@syr.edu	Hongdi	Li
2	2	123@syr.edu	Hardi	Li
3	3	345@syr.edu	HHH	Lee

	address_id ▾	primary_street ▾	secondary_street ▾	city ▾	region ▾	postal_code ▾	country ▾
1	1	119 diana ave	NULL	Syracuse	NY	13210	US
2	2	2120 cowell blvd	111 apt	Davis	CA	95618	US
3	3	10095 colima rd	NULL	LA	CA	94536	US

	customer_id ▾	address_id ▾	address_type ▾
1	1	1	type-c
2	2	2	type-b
3	3	3	type-1



## Reflection

Use this section to reflect on your learning. To achieve the highest grade on the assignment you must be as descriptive and personal as possible with your reflection.

1. What are the key things you learned through the process of completing this assignment?
2. What were the challenges or roadblocks (if any) you encountered on the way to completing it?
3. Were you prepared for this assignment? What can you do to be better prepared?
4. Now that you have completed the assignment rate your comfort level with this week's material. This should be an honest assessment: (choose one)
  - 4 ==> I understand this material and can explain it to others.
  - 3 ==> I understand this material.
  - 2 ==> I somewhat understand the material but sometimes need guidance from others.
  - 1 ==> I understand very little of this material and need extra help.