CIS 115 WINTER 2019

To perform this activity, refer to the table structures in Figure 1-5 (pg 11) and the table listings in Appendix A (Pg539-546) in your text book

In Chapter 1, the normalization process was shown for just the BOOKS table. The other tables in the JustLee Books database are shown after normalization. Because the database needs to contain data for each customer's order, perform the steps for normalizing the following data elements to 3NF:

- Customer's name and billing address
- · Quantity and retail price of each item ordered
- Shipping address for each order
- Date each order was placed and the date it was shipped

Assume the unnormalized data in the list is stored in one table. Provide your instructor with a list of the tables you have identified at each step of the normalization process (that is, 1NF, 2NF, 3NF) and the attributes, or fields, in each table. Remember that each customer can place more than one order, each order can contain more than one item, and an item can appear on more than one order.

Please submit your answers to dropbox in D2L, under the "LAB 3" in a PDF. (If it is not in PDF, it will not be marked). Your answer should be simple such as:

Unnormalized

```
field 1, field 2, field 3, . . . . . field #
```

1NF

TABLE1: field 1, field 2, field 3, field #

T2 NAME: field 2, f1, f3, f#

2NF

TABLE1: field 1, field 2, field 3, field #

T2 NAME: f1, f2, f3, f# **T3 NAME**: f11, f22, f33, f#

<u>3NF</u>

TABLE1: field 1, field 2, field 3, field #

T2 NAME: f1, f2, f3, f# **T3 NAME**: f11, f22, f33, f# **TABLE4**: f21, f22, f23, f#

DUE: JAN 31st, 2019

MARKS OUT OF: /10 under LABS