Megan Moore Buff ID 1014735 Summer 1 2021 – CIDM 6350 Assignment 2

Given the following two tables

Receipt Table

ReceiptNo	CustomerId	ReceiptDate	Casheir	Total
2	33	2020-02-25	John	120.50
6	33	2021-03-12	Alice	312.25
19	222	2020-02-25	John	77.99

ReceiptEntries Table

ReceiptNo	LineNo	ItemDescription	uPrice	Quantity
19	1	Meat product #1125	25.00	2.00
19	2	Groceary #2232	7.99	1.00
2	1	Groceary #2232	7.99	1.00
2	2	Frozen Foods #0232	18.75	2.00
2	3	Meat product #1125	25.00	3.00
6	1	TV Model #9922	310.00	1.00

1-Write SQL DDL command to Create a database schema named "Assignment2"

```
-- Question 1.1
show databases;
select database();
create database if not exists Assignment2;
-- drop database Assignment2;
use Assignment2;
```

2-Write SQL DDL commands to create the "Receipt" and "ReceipteEntries" tables in the database "Assignment2"

See next answer where it shows both this and the next part.

3-Write SQL "insert into" commands to insert the data from the given tables into the tables you ceated in the previous question

```
-- Question 1.2 and 1.3 show tables;
-- drop table Receipt; create table Receipt (
ReceiptNo Int primary key,
CustomerId varchar(20) null default 'no text',
ReceiptDate varchar(20) null default 'no text',
Cashier varchar(20) null default 'no text',
Total decimal(10,2)
);
desc Receipt;
insert into Receipt values
```

```
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(2,33,2020-02-25,'John',120.50),(6,33,2021-03-12,'Alice',312.25),
(19,222,2020-02-25,'John',77.99);
select * from Receipt;
-- drop table ReceiptEntries;
create table ReceiptEntries (
ReceiptNo Int,
LineNo int.
ItemDescription varchar(20) null default 'no text',
uPrice decimal(10,2),
Quantity decimal(10,2)
);
desc ReceiptEntries;
insert into ReceiptEntries values (19.1, Meat product
#1125',25.00,2.00),(19,2,'Groceary #2232',7.99,1.00),(2,1,'Groceary
#2232',7.99,1.00),(2,2,'Frozen Foods #0232',18.75,2.00),(2,3,'Meat
product #1125',25.00,3.00),(6,1,'TV Model #9922',310.00,1.00);
select * from ReceiptEntries;
```

Screenshot from MySQLWorkbench

```
MySQL Workbench

    ★ Local instance MySQL80 ×
File Edit View Query Database Server Tools Scripting Help
Assignment2 ×
SCHEMAS
                           Q Filter objects
                                  -- Ouestion 1.1
 ▼ 🗐 assignment2
                            2 • show databases;
   ▼ Tables
                            3 • select database();
     ▼  receipt
                            4 • create database if not exists Assignment2;
        ▼ 🐼 Columns

    ReceiptNo

                                  -- drop database Assignment2;
            CustomerId
                            6 • use Assignment2;
            ReceiptDate
                            7

    Cashier

            Total
                            8
                                 -- Ouestion 1.2 and 1.3
        ▶ 🔚 Indexes
                            9 •
                                 show tables;
        ► Toreign Keys
                           10
                                 -- drop table Receipt;
        Triggers
                           11 • ⊖ create table Receipt (
     ▼ 🐼 Columns
                           12 ReceiptNo Int primary key,
            ReceiptNo
                           13 CustomerId varchar(20) null default 'no text',
            LineNo
                           14
                                ReceiptDate varchar(20) null default 'no text',
            ItemDescription
                                Cashier varchar(20) null default 'no text',
            uPrice
                           15
            Quantity
                           16
                                 Total decimal(10,2)
         Indexes
                           17
        Foreign Keys
       ► 📅 Triggers
                           18 • desc Receipt;
     Tiews
                           19 • insert into Receipt values (2,33,2020-02-25, 'John',120.50),(6,33,2021-03-12,'Alice',312.25),
     Tored Procedures
                            20 • select * from Receipt;
     Functions
 sakila 🗎 sakila
                            21
                                 -- drop table ReceiptEntries;
 sys
                            22 • Greate table ReceiptEntries (
 ▶ ■ world
                            23
                                 ReceiptNo Int,
                            24
                            25
                                 ItemDescription varchar(20) null default 'no text',
                            26
                                 uPrice decimal(10.2).
                            27
                                 Quantity decimal(10,2)
                            28
                                );
                            29 desc ReceiptEntries;
 Administration Schemas
```

4-Answer the following questions:

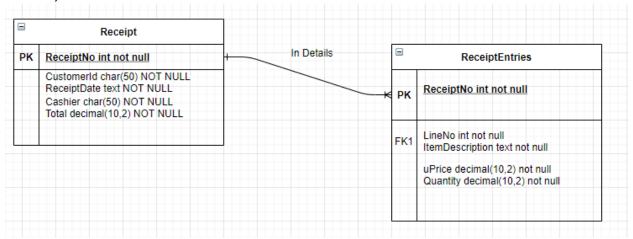
i) What would be the best primary key for each table?

For Receipts, use ReceiptNo
For ReceiptEntries, also use ReceiptNo

ii) If the two tables are associated via a 1-to-M "Has" relationship (i.e. each *Receipt* "has" one or more *ReceiptEntries*, and each *ReceiptEntry* belongs to one and only one *Receipt*), then which column in the given tables will be used as FK to realize this relationship (don't add any new columns)?

This could be the LineNo from the ReceiptEntries table

Draw Crow's foot ERD for these tables showing, the attributes, the keys (PKs and/or FKs), and the "Has" relationship (with cardinality and optionality) between "Receipt" and "ReceiptEntries". (i.e. include all of the details)



iv) Show the type of each entity in your ERD (strong/weak), and show the type of the "Has" relationship (identifying/non-identifying)

