## Assignment 2 of Ankur Prajapati (n01324892)

## Hands on Assignment of Chapter 1

To perform assignments 1 to 5, refer to the table structures in Figure 1-5 and the table listings in Appendix A.

1. Which tables and fields would you access to determine which book titles have been purchased by a customer and when the order shipped?

**Answer.** I would access given tables with their fields:

Tables	Fields of Table			
CUSTOMERS	Customer#, Lastname, Firstname			
ORDERS	Order#, Customer#, Shipdate			
ORDERITEMS	Item#, ISBN			
BOOKS	Title, ISBN			

## 2. How would you determine which orders have not yet been shipped to the customer?

**Answer.** To determine which orders have not yet been shipped to the customer, I will access this tables with their fields first:

Tables	Field of Tables	
CUSTOMERS	Customer#, Lastname, Firstname	
ORDERS	Order#,Customer#, Orderdate, Shipdate	

Using this table I will get the list of orders, which should be shipped till the current date.

For example,

## **SELECT Order# FROM ORDERS where Shipdate = 22-JAN-2019.**

// List of order that should be shipped till 22nd Jan, 2019.

After that I will conform for the order that are remaining to be shipped.

3. If management needed to determine which book category generated the most sales in April 2009, which tables and fields would they consult to derive this information?

**Answer.** They would consult these tables and fields for April 2009: (For this they have to just consult this tables for April 2009 only.)

Table	Field of Tables		
BOOKS	ISBN, Cost, Retail, Discount, Category		
ORDERITEMS	Item#, Quantity		
ORDERS	Order#, Orderdate		

4. Explain how you would determine how much profit was generated from orders placed in April 2009.

**Answer.** As we talked in question 3, to determine profit from orders placed in April 2009 we will calculate total cost of each category and total retail price for each category. After that if the customer got discount then calculate total price customer paid **(retail - discount)**, if it's greater than cost that means it is a profit. We can do this for whole April 2009 and calculate total profit by summing it up for April 2009.

5. If a customer inquired about a book written in 2003 by an author named Thompson, which access path (tables and fields) would you need to follow to find the list of books meeting the customer's request?

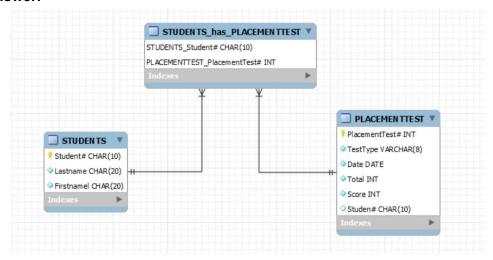
**Answer.** I need to follow these access path to find the list of books meeting the customer's request:

Tables	Fields of table		
BOOKS	ISBN, Title, Pubdate, PubID, Category		
BOOKAUTHOR	ISBN, AuthorID		
AUTHOR	AuthorID, Lname, Fname		
PUBLISHER	PubID, Name, Contact, Phone		

In assignments 6 to 10, create a simple E-R model depicting entities and relationship lines for each data scenario.

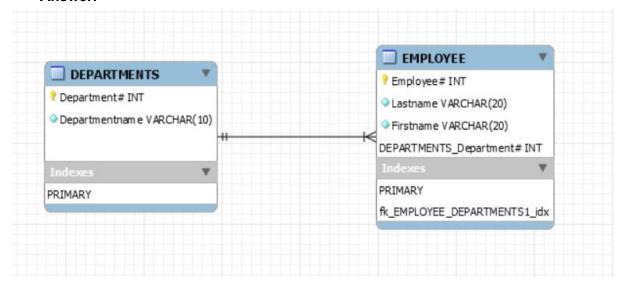
6. A college needs to track placement test scores for incoming students. Each student can take a variety of tests, including English and math. Some students are required to take placement tests because of previous coursework.

Answer.



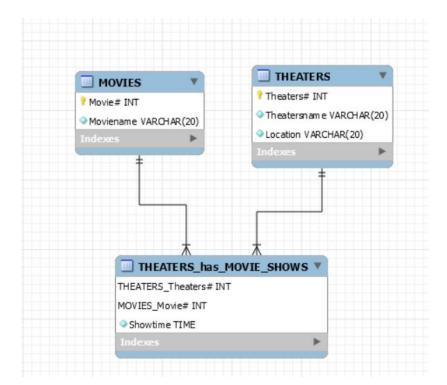
7. Every employee in a company is assigned to one department. Every department can contain many employees.

Answer.

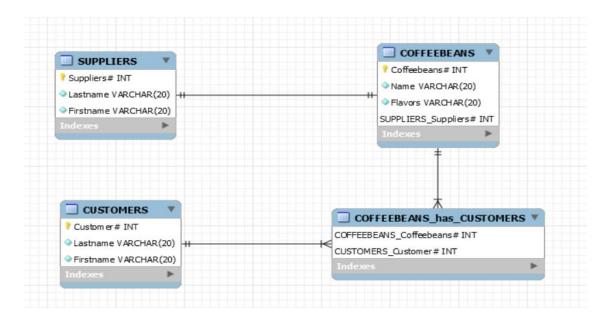


8. A movie megaplex needs to collect movie attendance data. The company maintains 16 theaters in a single location. Each movie offered can be shown in one or more of the available theaters and is typically scheduled for three to six showings in a day. The movies are rotated through the theaters to ensure that each is shown in one of the stadium-seating theaters at least once.

Answer.



9. An online retailer of coffee beans maintains a long list of unique coffee flavors. The company purchases beans from a number of suppliers; however, each specific flavor of coffee is purchased from only a single supplier. Many of the customers are repeat purchasers and typically order at least five flavors of beans in each order. Answer.



10. Data for an information technology conference needs to be collected. The conference has a variety of sessions scheduled over a two-day period. All attendees must register for the sessions they plan to attend. Some speakers are presenting only one session, whereas others are handling multiple sessions. Each session has only one speaker.
Answer.

