

Lab Assignment 1

Deadline: Wednesday: 9/11/2005 - before 2:00PM

Objectives:

Practice on SQL statements.

Requirements:

DVD Database

DVD	Number	Title	year	Class
	10	Titanic	1997	Drama
	20	Robots	2005	Comedy
	30	Penguins	2005	Documentary
	40	Star Wars	1986	Action
	50	Mission Impossible	2000	Action
	60	Gone with the wind	1950	Drama

Customer	ID	Name	Address	Tel
	A1	Ahmed	Shamya	9301212
	B1	Ali	Salmya	6546544
	A2	Fatma	Khaldya	7531599
	C1	Jasem	Adeilya	6684621
	C2	Kamal	Hawally	9502121
	B2	Hala	Surra	6614725

Subscription	ID	Date	Charge	Expire
	A1	10/11/03	50	10/11/05
	B1	5/5/04	20	5/5/05
	A2	20/1/04	20	20/8/05
	C1	10/12/03	40	10/12/05
	C2	15/11/03	40	15/11/05

Rent	ID	Number	Rent Date	Due Date	Price
	A1	50	15/9/04	15/10/04	10
	A2	40	22/5/04	22/6/04	12
	A1	10	10/3/05	10/6/05	30
	A2	50	15/2/05	15/3/05	10
	C1	30	2/6/04	2/8/04	20
	C2	10	24/3/05	30/3/05	5

Return	ID	Number	Rent Date	Return Date	Extra Price
	A1	50	15/9/04	10/10/04	
	A2	40	22/5/04	20/6/04	
	A1	10	10/3/05	15/6/05	
	A2	50	15/2/05	10/3/05	
	C1	30	2/6/04	1/8/04	
	C2	10	24/3/05	10/4/05	

A DVD rental shop needs to design a database system for its customers. First a table called DVD has the DVD serial number, title, year, classification. The classification could only the values Drama, Comedy, Action and Documentary. Then another table named Customer includes the customer ID, name, telephone number and address. A Subscription table has the subsections of customers as well as the start date, expiration date and the subscription charge. Furthermore, the table Rent keeps track of customers renting DVDs, price, date of renting and due date. Finally, a table called Return has customers return date of their rented DVDs along with extra costs if any with default value of zero.

Determine the necessary integrity constraints to be enforced on the schemas of the given tables. Make sure the references to **Rent** table are set to null on deletion, but the others are cascaded. Use the proper data types for the columns, and write the correct DDL SQL statements in Oracle to create the tables. Then, populate the tables with the given data. Finally, Solve these queries in SQL:

1. Give a penalty of 2KD as an extra price to those who have return date that passed the due date. Use only **IN** operator. Show the table contents before and the changes.
2. Repeat the previous query using **EXISTS** instead of **IN**.
3. Show the customer names who did not rent any Drama movies.
4. Show the customer names who rented only two Action movies.
5. For each customer show how many movies were rented based on the classification. (Drama, Action, Comedy).

Rules for Delivery:

- Write your name, ID, semester, course number, assignment number in the text file.
- Make a spool for all table creations and other queries.
- Describe all the tables, and show all their contents.
- Send the files as attachments to the email address as it is given in the discussion board, before the deadline.
- Deliver a hard copy of all the files in the MCC box before the deadline.
- Any violation of the above points means some marks will be deducted.

Good Luck