

DBMS LAB ASSIGNMENT

Assignment SQL - I

1. Create the following Tables -

1.1 Customer master table: **Cust**

<u>Column Name</u>	<u>Format</u>	<u>Remarks</u>
cust_id	varchar2(3)	Primary key, not-null
lname	varchar2(15)	
fname	varchar2(15)	
area	varchar2(2)	
phone_no	number(8)	

1.2. Movies master table : **Movie**

<u>Column Name</u>	<u>Format</u>	<u>Remarks</u>
mv_no	varchar(2)	Primary key not null
title	varchar2(25)	
type	varchar2(10)	
star	varchar2(25)	

1.3. Invoice transaction table : **Invoice**

<u>Column Name</u>	<u>Format</u>	<u>Remarks</u>
Inv_no	varchar2(3)	primary key not null
Mv_no	varchar(2)	
Cust_id	varchar2(3)	
Issue_date	date	
Return_date	date	

1.4. Add the following constraints

- INVOICE(Cust_id) references CUST(Cust_id)
- INVOICE(Mv_no) references MOVIE(Mv_no)
- Declare NOT NULL : lname, fname, title, type

1.5. Add a new column PRICE in Movie table with data type number(8,2)

Assignment SQL - II

2. Insert the following data into the respective tables :

2.1. **Data for Cust table**

<u>Cust_id</u>	<u>Lname</u>	<u>fname</u>	<u>Area</u>	<u>Phone_no</u>
a01	Bayross	Ivan	sa	6125467
a02	Saitwal	Vandana	mu	5560379
a03	Jaguste	Pramada	da	4563891
a04	Navindgi	Basu	ba	6125401
a05	Sreedharan	Ravi	va	-
a06	-	Rukmini	gh	5125274

2.2. **Data for Movie table**

<u>mv_no</u>	<u>title</u>	<u>type</u>	<u>star</u>	<u>price</u>
1	bloody vengeance	action	jackie chan	180.95
2	the firm	thriller	tom cruise	200.00
3	pretty woman	romance	richard gere	150.55
4	home alone	comedy	macaulay culkin	150.00
5	the fugitive	thriller	harisson ford	200.00
6	coma	suspense	michael douglas	100.00
7	dracula	horror	gary oldman	150.25
8	quick change	comedy	bill muray	100.00
9	gone with the wind	drama	clarke gable	200.00
10	carry on doctor	comedy	leslie phillips	100.00

2.3. **Data for Invoice table**

<u>inv_no</u>	<u>mv_no</u>	<u>cust_id</u>	<u>issue_date</u>	<u>return_date</u>
i01	4	a01	23-july-93	25-jul-93
i02	3	a02	12-aug-93	15-aug-93
i03	1	a02	15-aug-93	18-aug-93
i04	6	a03	10-sep-93	12-sep-93
i05	7	a04	05-aug-93	08-aug-93
i06	2	a06	18-sep-93	21-sep-93
i07	9	a05	07-jul-93	10-jul-93
i08	9	a01	11-aug-93	14-aug-93
i09	5	a03	06-jul-93	07-jul-93
i10	8	a06	03-sep-93	06-sep-93

Assignment SQL - III

3. Write SQL statements to retrieve these query :

- 3.1. Find out the names of all the customers.
- 3.2. Print the entire customer table.
- 3.3. Retrieve the list of fname and the area of all the customers.
- 3.4. List the various movie types available from the movie table.
- 3.5. Print the information of invoice table in the following format for all records

- A)The Invoice No. of Customer Id. {cust - id} is {inv - no} and Movie No. is {mv - no}.
 B){cust-id} has taken Movie No. {mv-no} on {issue-date} and will return on (return_date).
- 3.6. Change the telephone number of prarnada to 466389.
 - 3.7. Change the issue - date of cust- id 'A01' to 24/07/93.
 - 3.8. Change the price of 'gone with the wind' to Rs. 250. 00.
 - 3.9. Delete the record with invoice number 'I 08' from the invoice table.
 - 3.10. Delete all the records having return date before 10th July'93
 - 3.11. Change the area of cust - id 'A05' to 'vs'.
 - 3.12. Change the return date of invoice number 'I08' to 16-08-93.
 - 3.13. Find the names of all customers having 'a' as the second letter in their fnames.
 - 3.14. Find the lnames of all customers that begin with 's ' or 'j' .
 - 3.15. Find out the customers who stay in an area whose second letter is 'a'.
 - 3.16. Find the list of all customers who stay in area 'da' or area 'mu' or area 'gh'.
 - 3.17. Print the list of employees whose phone numbers are greater than the value 5550000.
 - 3.18. Print the information from invoice table of customers who have been issued movies in the month of September.
 - 3.19. Display the invoice table information for cust - id 'a01' and 'a02'.
 - 3.20. Find the movies of type 'action' and 'comedy'.
 - 3.21. Find the movies whose price is greater than 150 and less than or equal to 200.
 - 3.22. Find the movies that cost more than 150 and also find the new cost as original cost * 15.
 - 3.23. Rename the new column in the above query as new-price.
 - 3.24. List the movies in sorted order of their titles.
 - 3.25. Print the names and types of all the movie except horror movies.
 - 3.26. Divide the cost of movie 'home alone' by difference between its price and 100.
 - 3.27. List the names, areas and cust - id of customers without phone numbers.
 - 3.28. List the names of customers without lname.
 - 3.29. List the mv - no, title, type of movies whose stars begin with letter 'm'.
 - 3.30. List the mv-no and inv-no of customers having inv-no less than 'i05'from the Invoice Transaction Table.

Assignment SQL - IV

- 4.1. Calculate the square root of the price of each movie.
- 4.2. Count the total number of customers.
- 4.3. Calculate the total price of all the movies.
- 4.4. Calculate the average price of all the movies.
- 4.5. Determine the maximum and minimum movie prices. Rename the title as max-price and min_price respectively.
- 4.6. Count the number of movies having price greater than or equal to 150.
- 4.7. Print the type and average price of each movie.
- 4.8. Find the number of movies in each type.
- 4.9. Count separately the number of movies in the 'comedy' and 'thriller' types.
- 4.10. Calculate the average price for each type that has a maximum price of 150.00.
- 4.11. Calculate the average price of all movies where type is 'comedy' or 'thriller' and price is greater than or equal to 150.00.
- 4.12. Display the invoice number and day on which customers were issued movies.

- 4.13. Display the month (in alphabets) in which customers are supposed to return the movies.
- 4.14. Display the 15 days after the issue-date in the format 'dd-month-yy'.
For eg. 12-february-93.
- 4.15. Find the number of days elapsed between the current date and the return date of the movie for all customers.

Assignment SQL - V

- 5.1. Find out the movie number which has been issued to 'ivan'.
- 5.2. Find the names and movie numbers of all the customers who have been issued a movie.
- 5.3. Select the title, cust - id, mv - no for all the movies that are issued.
- 5.4. Find out the title and types of the movies that have been issued to 'Vandana'.
- 5.5. Find the names of customers who have been issued movie of type 'drama'.
- 5.6. Display the title, lname, fname for customers having movie number greater than or equal to three, in the following format:
The movie taken by (fname) {lname} is {title}.
- 5.7. Find out which customers have been issued movie number 9.
- 5.8. Find the customer name and area with invoice number 'i10'.
- 5.9. Find the customer names and phone numbers who have been issued movies before the month of August.
- 5.10. Find the name of the movie issued to 'vandana' and 'ivan'.
- 5.11. List the movie number, movie names issued to all customers.
- 5.12. Find the type and movie number of movie issued to cust - id 'a01' and 'a02'.
- 5.13. Find out if the movie starring 'tom cruise' is issued to any customer and print the custid to whom it is issued.
- 5.14. Find the lname, fname who have been issued movies.
- 5.15. Find the name of customer whose has not issued any movie

Assignment SQL - VI

- 6.1. Create a view with custno, fname, lname of cust table.
- 6.2. Retrieve all customers name from cust table.
- 6.3. Create another view for those customers who have been issued movies.
- 6.4. Create a table with two columns odd number, even number to store odd and even numbers between 1 to 100.
- 6.5. Generate odd and even numbers using sequences.
- 6.6. Create a sequence for the column mv_no of Movie table to generate movie no with initial value 10, maximum value 100 and incremented by 1.
- 6.7. Generate mv_no with sequence above in Movie table.
- 6.8. Create an index on price column of movie table and retrieve the indexed data.

Assignment SQL - VII

- 7.1. Create a user with your name
- 7.2. Give select, insert, update permission on cust, movie table of user 'scott' to your user account
- 7.3. Assign only insert permission on invoice table of user 'scott' to your current account.
- 7.4. Check the permission has properly granted using system tables.
- 7.5. Write a PL/SQL block to print the message "Welcome to PL/SQL" on the screen.
- 7.6. Write a PL/SQL block to find the summation of given two numeric values.
- 7.7. Write a PL/SQL to find out the customer id and name who has issued a movie and their elapsed date between issue date and return date is less than two days
- 7.8. Write a PL/SQL block to find the summation of two numeric values using function where two numeric values will be passed into function as parameters.
- 7.9. Create an insert trigger to check the price of the each movie must not be greater than 500.
- 7.10. Add a new column: total_issued in the Movie table to count how many copies has issued to each movie. Create a insert trigger on invoice to increment the values of Total_issued whenever a new rows inserted into the invoice table.