

**Department Of Information Technology**

**Indian Institute Of Engineering Science and Technology-**  
**Shibpur**

**DBMS LAB-IT552**

**YEAR 2022**

**Assignment 1**

**Create the following tables:-**

**Table: cust**

Attributes	Data Type	Size	Condition
Cust_id	Varchar2	3	
Lname	Varchar2	15	
Fname	Varchar2	15	
Area	Varchar2	2	
Phone_no	number	8	

**Table: movie**

Attributes	Data Type	Size	Condition
Mv_no	number	2	
Title	Varchar2	25	
Type	Varchar2	10	
Star	Varchar2	25	
Price	number	8,2	

**Table: invoice**

Attributes	Data Type	Size	Condition
Inv_no	Varchar2	3	
Mv_no	number	2	
Cust_id	Varchar2	3	
Issue_date	date		
Return_date	date		

### Single table Retrieval:-

- Find out the names of all the customers.
- List the various movie types available from the movie table.
- Print the list of all employees whose phone numbers are greater than the value 5550000.
- Find the movies of type 'action' or 'comedy'.
- Find the movies whose price is greater than 150 and less than or equal to 200.
- Find the names of all customers having 'a' as the second letter in their fnames.
- Find the lname of all customers that begins with 's' or 'j'.
- Find out the customers who stay in an area whose second letter is 'a'.
- Find the list of all customers who stay in area 'da' or area 'mu' or area 'gh'.
- List the mv\_no , title, type of movies whose stars begin with letter 'm'.
- Find the movies that cost more than 150 and also find the new cost as original cost \* 15.
- List the movies in stored order of their titles.
- Print the names and types of all the movies except horror movies.
- Divide the cost of movie 'home alone' by difference between its price and 100.
- List the names, areas, and cust\_id of customers without phone numbers.
- List the names of customers without lname.
- Print the information from invoice table of customers who have been issued movies in the month of September.

### Set Function and Concatenation:-

- Count the total no. of customers.
- 19.** Calculate the total price of all movies.
- 20.** Calculate the average price of all movies.
- Calculate the maximum and minimum movie prices. Rename the title as max\_price and min\_price respectively
  - Count the number of movies having price greater than or equal to 150.
  - Print the information of invoice table in the following format for all records.
- The Invoice no. of Customer Id {cust\_id} is {inv\_no} and Movie no. is {mv\_no}.
  - {cust\_id} has taken Movie no. {mv\_no} on {issue\_date} and will return on {return\_date}

### Having and Group By:-

- Print the type and average price of each movie.
  - Find the number of movies in each type.
  - Count separately the number movies in the 'comedy' and 'thriller' types.
- 27.** Calculate the average price for each type that has a maximum price of Rs. 150.
- 28.** Calculate the average price of all movies where type is 'comedy' or 'thriller' and

price is greater than or equal to Rs. 150.

### **Joins and Correlations:-**

- Find out the movie number which has been issued to 'Ivan'.
- Find the names and movie numbers of all the customers who have been issued a movie .
- Select the title ,cust\_id, mv\_no for all the movies that are issued.
- Find out the title and types of the movies that have been issued to 'Vandana'.
- Find the names of customers who have been issued movie of type 'drama'.
- 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}.

### **Nested Queries:-**

- Find out which customers have been issued movie number 9.
- 36.**Find the customer name and area with invoice number 'i10'.
- 37.**Find the name of the movie issued to 'Vandana' or 'Ivan'.
- Find the type and movie number of movie issued to cust\_id 'a01' or 'a02'.
  - Find out if the movie starring 'tom cruise' is issued to any customer and print the cust\_id to whom it is issued.
  - Find the customer names and phone numbers who have been issued movies before the month of August.
  - List the movie number, movie issued to all customers.

### **Queries using date:-**

- Display the invoice number and day on which customers were issued movies.
- Display the month (in alphabets) in which customers are supposed to return the movies.
- Display the issue\_date in the format "dd-month-yy" e.g. 12-February- 93
- Find the date, 15 days after the current date.
- Find the number of days elapsed between the current date and the return date of the movie for all customers.

### **Table Updates:-**

- Change the telephone number of 'Pramada' to 466389.
- Change the issue\_date of cust\_id 'a01' to 24/07/93.
- Delete the record with invoice number 'i08' from the invoice table.
- Delete all the records having return date before 10<sup>th</sup> July 93.