Assignment : 4

1 Create the following tables with the constraints mentioned :
Note: the data type and size should to give in relevance with the data to be inserted. Constraints name are not required to be given for this assignment.

Movie

cust_id Primary Key	Fname NotNull	Lname	Area NotNull	Phone
A01	Ivan	ROM	SA	6125467
A02	Vandana	Ray	MU	5560379
A03	Pramoda	Jauguste	DA	4560389
A04	Basu	Navindi	BA	6125401
A05	Ravi	Shridhar	NA	Null
A06	Rukmini	Aiyer	AH	5125274

- CREATE TABLE Customer $ (
  cust_id VARCHAR (30) Not Null Primary Key ,
  Fname varchar (30) Not Null ,
  Lname varchar (30) ,
  Area varchar (5) Not Null ,
  Phone varchar (15) Null
  );

- INSERT INTO Customer (cust_id , Fname , Lname , Area , Phone)
  values
  ("A01", "Ivan", "ROM", "SA", 6125467) ,
  ("A02", "Vandana", "Ray", "MU", 5560379),
  ("A03", "Pramada", "Jauguste", "DA", 4560389),
  ("A04", "Basu", "Navindi", "BA", 6125401),
  ("A05", "Ravi", "Shridhar", "NA", NULL),
  ("A06", "Rukmini", "Aiyer", "AH", 5125274);

```
SELECT * FROM Customeer ;

CREATE TABLE Customeer ;
 MV_NO int not Null Primary Key ,
 Cust_id varchaer (3) Not Null ,
 TiHe varchaer (60) Not Null ,
 Staer varchaer (3) Not Null ,
 Price int Not Null ,
 Constraint chk_price CHECK (Price bitween 100 AND 250),
 CONSTRAINT fk_movie_customeer FOREIGN KEY
 (cust_id) REFERENCES customeer (cust_id)
 );
```

- INSERT INTO MOVie (MV_NO, cust_id, TiHe, Staer, price)

```
( 1, '402', `Bloody', 181 ),
( 2, '404', 'The Fiem', 'TC', 200),
( 3, '401', 'Pretty Woman', 'RG', 151),
( 4, '406', 'Home Alone', 'MC', 150),
( 5, '405', 'The Fugitive', 'HF', 200),
( 6, '403', 'Coma', 'MD', 100),
( 7, '402', 'Dracula', 'GO', 150),
( 8, '406', 'Quick change', 'BM', 100),
( 9, '403', 'Gone with the wind', 'CB', 200),
(10, '405', 'Carry on Doctor', 'LP', 100);
```

2. Prove that entity integrity constraint is ensured by both the tables. (2 conditions to be checked).

- SELECT cust_id FROM customer WHERE cust_id IS NULL;

Output:
Empty set.

- SELECT MV_NO FROM Movie WHERE MV_NO is NULL;

Output:
Empty set.

3. Prove that referential integrity constraint is ensured by both the tables.

- SELECT DISTINCT cust_id FROM Movie WHERE cust_id NOT IN (SELECT cust_id FROM customer);

Output:
Empty set.

4. Prove that domain integrity constraint is ensure by the Movie table.

- SELECT * FROM Movie WHERE Price < 100 OR Price > 250;

Output:
Empty set.

5. Display the movie titles whose price is greater than 100 but less than 200.

SELECT Title FROM Movie WHERE Price > 100 AND Price < 200;

Title
Pretty Woman
Home Alone
Dracula

6. Display the cust_id who have seen movies having stars as either TC or TC or MC.

- SELECT cust_id FROM Movie WHERE Star IN ("TC", "TC", "MC");

cust_id
A02
A04
A06

Display the details of those customers who have area name.

- SELECT * FROM customer WHERE Area LIKE "%A%";

cust_id	Fname	Lname	Area	Phone
A01	Ivan	Ross	SA	6125467
A03	Pramada	Auguste	DA	4560389
A04	Basu	Navindi	BA	6125401
A05	Ravi	Shridhar	NA	NULL

Display the movie titles, whose price is within 180 and the movie titles are of exactly 6 letters.

- SELECT Title FROM Movie WHERE PRICE <=180 AND LENGTH (Title) = 6;

Title
Coma

Display the movie name, their original prices and the prices after 10% increment. Give alias name to the increment. Give alias name to the incremented price column.

- SELECT Title, Price As original Price, Price * 1.10 AS Incremented Price FROM Movie;

Title	original Price	incrementedPrice
Bloody	181	199.1
The Film	200	220
Pretty woman	151	166.1
Home Alone	150	165
The Fugitive	200	220
Coma	100	110
Dracula	150	165
Quick change	100	110
Gone with the wind	200	220
Carry on Doctor	100	110

Display all the customers details in the following way.
'Ivan Ross stays in SA and his phone number is 6125467.

- SELECT CONCAT (Fname, " ", Lname, " ", "stays in ", "Area", " and his phone number is ", "Phone", ".") AS DETAILS.

Add not null constraint to the Lname field in customer.

- ALTER TABLE Customer MODIFY Lname varchar (20) NOT NULL.

Output:
Query OK, 0 rows affected.

Display the customer name whose phone number is not recorded.

- SELECT Fname, Lname FROM Customer WHERE Phone IS NULL;

Fname	Lname
Rari	Shridhar

Add the phone number according to your own wish for the person mentioned in problem no 7.

- UPDATE Customer SET phone = 9999999 WHERE cust_id = "A05";

Cust_id	Phone
A05	9999999

Display the unique customer id's from movie table.

- SELECT DISTINCT cust_id FROM Movie;

cust_id
A01
A02
A03
A04
A05
A06

Remove the not null constraint from star column in movie table.

- ALTER TABLE Movie MODIFY star varchar (10) NULL;

Delete any row from the customer table. If you cannot delete, then note the error message displayed.

- DELECT FROM Customer WHERE cust_id = "A01";

Output: ERROR 1451 (23000): Cannot delete or update a parent row:

Delete any row from the Movie table. If you cannot delete, then note the error message displayed.

- DELETE FROM Movie WHERE MV-NO = 1 ;

Output:

Query OK, 1 row affected.

Drop the customer table. If you cannot drop, then note the error message displayed.

- DROP TABLE Customer ;

Output:

ERROR 3730 (HY000): Cannot drop table "Customer" because it is referenced by a foreign key constraint.

Drop the movie table. If you cannot drop, then note the error message displayed.

- DROP TABLE Movie ;

Output:

Query OK, 0 rows affected.

Drop the Foreign key from Movie table.

- ALTER TABLE Movie DROP FOREIGN KEY Movie_ibfk_1 ;

Output:

Query OK, 0 rows affected.