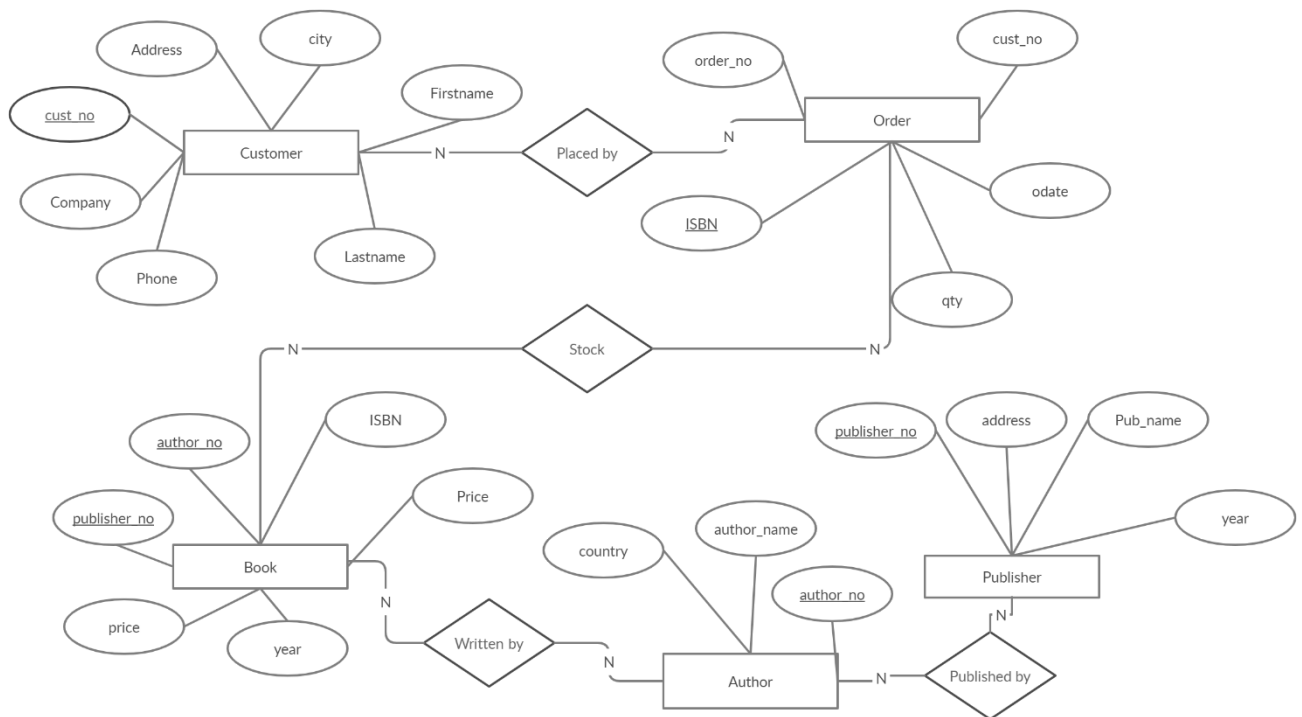


DBMS LAB 2
Assignment 3
Roll No :- 31384

ER Diagram :-



Code:-

/* Assignment 3 */

create database book;

use book;

select * from customer where (city = 'pune' or city = 'mumbai') and (cust_fname LIKE 'a%' or cust_fname LIKE 'd%');

select DISTINCT city from customer;

SET SQL_SAFE_UPDATES = 0;

update book set unitprice = unitprice + (unitprice * 0.05) where year=2015;

delete from customer where city = 'pune';

select DISTINCT * from publisher where year IN (2015,2016);

select * from book where unitprice in(select max(unitprice) from book);

select * from book where unitprice between 300 AND 400;

```
select title,unitprice,year from book order by year DESC;
```

```
select title,author_no,publisher_no from book where year in(2002,2004,2006);
```

```
/* Assignment 4 */
```

```
select * from Customer natural join order_;
```

```
select book.title,author.authorname,author.country from book left join author on book.author_no = author.author_no;
```

```
select Customer.cust_no,Customer.cust_fname,Customer.cust_lname,Order_.order_no from Customer left join Order_ on  
Customer.cust_no=Order_.cust_no where odate is null;
```

```
select book.title, book.ISBN, Order_.order_no from book left join Order_ on book.ISBN = Order_.ISBN where Order_.odate  
is null;
```

```
select Customer.cust_fname, book.title, book.author_no , book.year from Customer left join Order_ on Customer.cust_no  
= Order_.cust_no left join book on Order_.ISBN = book.ISBN;
```

```
select count(book.title), Customer.cust_fname, Customer.cust_lname from Customer left join Order_ on Customer.cust_no  
= Order_.cust_no left join book on Order_.ISBN = book.ISBN;
```

```
select Customer.cust_no, Order_.order_no, Order_.ISBN from customer left join Order_ on Customer.cust_no =  
Order_.cust_no left join book on Order_.ISBN = book.ISBN where book.title="Conquer";
```

```
select Customer.cust_company from Customer left join Order_ on Customer.cust_no = Order_.cust_no left join book on  
Order_.ISBN = book.ISBN where book.year=2015;
```

```
use book;
```

```
create view Book_author_view1 as select book.title ,author.author_no,author.authername,author.country from book left  
join author on book.author_no= author.author_no;
```

```
select * from Book_author_view1;
```

Output :-

1. Insert at least 10 records in customer table and insert others accordingly.

```
mysql> select * from customers;
```

custno	custfname	custlname	company	addr	city	custp
101	XYZ	PQR	ABComapny	katraj	pune	848
102	XYZ1	PQR1	ABComapny1	rahtani	pune	848
103	ramesh	shinde	infotech	rahatani	pune	321
104	sourabh	chile	infratech	talegaon	pune	323
105	rushikesh	deshmukh	infratech	talegaon	pune	332
106	atul	gokhale	Arutya	kasarwadi	pune	432
108	atul	sardesai	Arutya	kasarwadi	pune	432
109	rahul	ghogare	ITPoint	ramdasnaagr	sangali	423
110	rajendra	ghodase	ITEnabled	mumbanagar	mumbai	423
111	acharya	thonde	realwood	kelekarwadi	ahmednagar	937

```
10 rows in set (0.01 sec)
```

```
mysql> select * from orders;
```

orderno	ISBN	qty	odate	custno
9	23121	1110	2010	110
8	23123	1120	2020	109
4	23212	345	2018	104
10	23321	1120	2011	111
6	32233	423	2020	106
7	32323	1000	2020	108
5	82342	432	2019	105
3	83642	400	2017	103
1	83837	200	2019	101
2	83838	150	2020	102

```
10 rows in set (0.01 sec)
```

```
mysql> select * from book;
```

title	price	author_no	pub_no	pub_year	ISBN
Conquer	2000	12	123	2017	83837
Quiet Man	1700	13	124	2019	83838
Rise of world	2390	14	125	2015	23121
Wings of fire	5000	15	126	2016	23123
Phiposophers stone	2700	16	127	2015	23212
Great wall of china	2231	17	128	2013	32233
The amazing spider man	2342	18	129	2015	23321
The goblet of fire	2342	19	129	2015	82342

```
8 rows in set (0.00 sec)
```

Conquer	2000	12	123	2017	83837
Quiet Man	1700	13	124	2019	83838
Rise of world	2390	14	125	2015	23121
Wings of fire	5000	15	126	2016	23123
Phiposophers stone	2700	16	127	2015	23212
Great wall of china	2231	17	128	2013	32233
The amazing spider man	2342	18	129	2015	23321
The goblet of fire	2342	19	129	2015	82342

8 rows in set (0.00 sec)

mysql> select * from author;

author_name	country	author_no
Mr.XYZ	USA	12
Mr.PQR	India	13
MR.albert	Russia	14
MR.Rajendra	Spain	16
MR.Powell	Costa Rica	17
MR.Rutherford	west indies	18
MR.russarman	Austrilia	19

7 rows in set (0.01 sec)

mysql> select * from publisher;

pub_addr	pub_name	year	pub_no
Los angles	Mr.PQR	2020	12
kolkata	Mr.XYZ	2018	13
Cos angles	Mr.alert	2000	14
Mandras	Mr.Rajendra	2004	15
Berg	Mr.Powell	2002	16
atlantik	Mr.Rutherford	2006	18
syndey	Mr.russarman	2002	19

7 rows in set (0.00 sec)

mysql>

Display all customers live in Pune or Mumbai and name start with 'a' or 'd'.

```
ERROR 1054 (42S22): Unknown column 'cust_fname' in 'where clause'
mysql> select * from customers where (city = 'pune' or city = 'mumbai') and (custfname LIKE 'a%' or cu
+-----+-----+-----+-----+-----+-----+-----+
| custno | custfname | custlname | company | addr | city | custphone |
+-----+-----+-----+-----+-----+-----+-----+
| 12 | Amit | Sharma | Infratech | Kasarwadi | Pune | 894783483 |
| 106 | atul | gokhale | Arutya | kasarwadi | pune | 4322231 |
| 108 | atul | sardesai | Arutya | kasarwadi | pune | 4322231 |
+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

List different city from customers;

```
Administrator: Command Prompt - mysql -u root -p
mysql> select distinct(city) from customers;
+-----+
| city |
+-----+
| pune |
| sangali |
| mumbai |
| ahmednagar |
+-----+
4 rows in set (0.01 sec)

mysql> _
```

Give 5 % increase in price of book with publishing year 2015.

```
Administrator: Command Prompt - mysql -u root -p

mysql> select * from book where pub_year=2015;
+-----+-----+-----+-----+-----+-----+
| title          | price | author_no | pub_no | pub_year | ISBN  |
+-----+-----+-----+-----+-----+-----+
| Rise of world  | 2510  | 14        | 125    | 2015     | 23121 |
| Phiposophers stone | 2835  | 16        | 127    | 2015     | 23212 |
| The amazing spider man | 2459  | 18        | 129    | 2015     | 23321 |
| The goblet of fire | 2459  | 19        | 129    | 2015     | 82342 |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> update book set price = price + ( price * 0.05) where pub_year=2015;
Query OK, 4 rows affected (0.01 sec)
Rows matched: 4  Changed: 4  Warnings: 0

mysql> select * from book where pub_year=2015;
+-----+-----+-----+-----+-----+-----+
| title          | price | author_no | pub_no | pub_year | ISBN  |
+-----+-----+-----+-----+-----+-----+
| Rise of world  | 2636  | 14        | 125    | 2015     | 23121 |
| Phiposophers stone | 2977  | 16        | 127    | 2015     | 23212 |
| The amazing spider man | 2582  | 18        | 129    | 2015     | 23321 |
| The goblet of fire | 2582  | 19        | 129    | 2015     | 82342 |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql>
```

Delete customers living in Pune.

```
mysql> use assignment2
Database changed
mysql> delete from cust where city="pune";
Query OK, 0 rows affected (0.01 sec)

mysql>
```

Find the names of author live in India or Australia.

```
Administrator: Command Prompt - mysql -u root -p

mysql> select * from author where country="India" or country="Australilia";
+-----+-----+-----+
| author_name | country | author_no |
+-----+-----+-----+
| MR.russarman | Austrilia | 19 |
| Mr.PQR | India | 13 |
+-----+-----+-----+
2 rows in set (0.01 sec)

mysql>
```

Find publisher established in 2015 as well as 2016.


```
Administrator: Command Prompt - mysql -u root -p

mysql> select * from publisher where year=2002 or year=2004;
+-----+-----+-----+-----+
| pub_addr | pub_name      | year | pub_no |
+-----+-----+-----+-----+
| Mandras  | Mr.Rajendra   | 2004 | 15     |
| Berg     | Mr.Powell     | 2002 | 16     |
| sydney   | Mr.russarman  | 2002 | 19     |
+-----+-----+-----+-----+
3 rows in set (0.01 sec)

mysql> _
```

Find book having maximum price with title and book price is in between 2000 to 3000.

```

Administrator: Command Prompt - mysql -u root -p
mysql> select title,max(price) from book;
+-----+-----+
| title | max(price) |
+-----+-----+
| Conquer | 5000 |
+-----+-----+
1 row in set (0.00 sec)

mysql> select title,price from book;
+-----+-----+
| title | price |
+-----+-----+
| Conquer | 2000 |
| Quiet Man | 1700 |
| Rise of world | 2636 |
| Wings of fire | 5000 |
| Phiposophers stone | 2977 |
| Great wall of china | 2231 |
| The amazing spider man | 2582 |
| The goblet of fire | 2582 |
+-----+-----+
8 rows in set (0.00 sec)

mysql> select title,price from book where price >= 2000 and price <=4000;
+-----+-----+
| title | price |
+-----+-----+
| Conquer | 2000 |
| Rise of world | 2636 |
| Phiposophers stone | 2977 |
| Great wall of china | 2231 |
| The amazing spider man | 2582 |
| The goblet of fire | 2582 |
+-----+-----+
6 rows in set (0.00 sec)

mysql> 

```

Display all the details of books in decreasing order of publishing year.

```
Administrator: Command Prompt - mysql -u root -p

mysql> select * from book order by pub_year DESC;
+-----+-----+-----+-----+-----+-----+
| title          | price | author_no | pub_no | pub_year | ISBN  |
+-----+-----+-----+-----+-----+-----+
| Quiet Man      | 1700  | 13        | 124    | 2019     | 83838 |
| Conquer        | 2000  | 12        | 123    | 2017     | 83837 |
| Wings of fire  | 5000  | 15        | 126    | 2016     | 23123 |
| Rise of world  | 2636  | 14        | 125    | 2015     | 23121 |
| Phiposophers stone | 2977 | 16        | 127    | 2015     | 23212 |
| The amazing spider man | 2582 | 18        | 129    | 2015     | 23321 |
| The goblet of fire | 2582 | 19        | 129    | 2015     | 82342 |
| Great wall of china | 2231 | 17        | 128    | 2013     | 32233 |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)

mysql> _
```

Display all books published in 2002,2004 and 2006.

```
Administrator: Command Prompt - mysql -u root -p

mysql> select * from publisher where year=2002 or year=2004 or year=2006;
+-----+-----+-----+-----+
| pub_addr | pub_name      | year | pub_no |
+-----+-----+-----+-----+
| Mandras  | Mr.Rajendra   | 2004 | 15     |
| Berg     | Mr.Powell     | 2002 | 16     |
| atlantik | Mr.Rutherford | 2006 | 18     |
| syndey   | Mr.russarman  | 2002 | 19     |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> _
```

Assignment No 3

Title :- Design atleast 10 SQL queries for suitable database application using SQL.

problem Statement :- Design atleast 10 SQL queries for suitable database application using SQL DML statements.

Objective :-

- To understand & implement the various DML commands.
- To understand database concept like functions & set.

slw :- MySQL

Learning objectives :-

- To understand & implement various DML commands.
- Functions & set operators.

Theory :-

DML is short form of Data Manipulation language which deal with data manipulation & includes most common SQL statement SELECT, INSERT & UPDATE.

i) Select :-

Select used to fetch data from database table

Syntax :- Select column.name(s) from
tablename;

ii) INSERT

Used to insert New record in a table.

Syntax :- INSERT into table.name (column... n)
values (value... n)

iii) UPDATE

Used to modify data into table.

Syntax: UPDATE table-name

Set column-name = value,

where some(column = somevalue;

iv) DELETE

used to delete data from database table

Syntax: DELETE From tableName

where column = somevalue;

Set operators -

i) Union :: It returns a union of two select statement.

```

Select * from table1 union
Select * from table2;
    
```

ii) Union all :: It returns a union of two select with duplicate values.

```

Select * from table1 union all
Select * from table2;
    
```

iii) Minus :: minus returns difference between first & second select statement.

```

Select * from table1 minus
Select * from table2;
    
```

iv) INTERSECT ::

Intersect two select statement

```

Select * from table1
intersect
Select * from table2;
    
```


Conclusion -

Thus we implemented the DML statements.