Rupesh Dharme
31124
TE1 K1

Assignment 02

Date : 29 July 2021

Title : SQL Queries

Problem statement :
a. Design and develop SQL DDL statemen which demonstrate the use of SQL objects such as Table, View, Index, Sequence, Synonym and constrains etc
b. Write at least 10 SQL queries on the database application using SQL DML statements.

Objectives :
- Understand and implement various DDL commands.
- Understand concepts like view, index, sequence and synonym

S/W and H/W Req :
MySQL, Intel(R) core(TM) i5, 4 cores Windows 10 64 bit

References :
Database management systems Laboratory.

Outcomes :
A basic anderstanding to MySQL queries.

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Theory

SQL - structured Query language

~~SQL~~

~~DDL~~ commands

① create table - used to create table

② Insert command
used to Insert entities into table,

③ Select command - to
used to retrieve data from table.

Data defination in SQL
Create, alter, drop, truncate

Create tables:

```
create table <table name>
( column_name  datatype (size),
  --||--
  :
  constrain const-name ---
);
```

- primary key:
  - it is unique for each entity
  - can not be blank
  - must not be null.

- Unique key:
  - prevent multiple entries of null
  - do not allow duplicates.

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- Foreign key:
  - establish relations in tables
  - columns in other tables which are unique

- on delete cascade:
  - if a record in parent is deleted corrosponding record in child is also deleted
  - on delete set null: instead of deliting req. field is set null.

Alter table:
alter table <table_name>
add (colmn_name datatype(size),
colmn_name2 datatype(size));

Drop table:
drop table <table_name>

Truncate
Trunc table <table_name>

* Some common queries
  1. Use database db;
  2. show tables;
  3. select * from customers;

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4. select * from customers where city = 'pune';
5. select * from customers where name like '%j';
6. delete from customers where id='1';

7. ER diagram:
attached ahead.

Test cases:

command	Exp o/p	Act o/p	Result
1. delete from customers where city='pune';	deleted rows wher city='pune'	same as expected	pass
2. select from books where price between 300 and 400;	title. 1 title1 2 title2	same as expected	pass
3. select * from books;	list of all books	same as expected	pass
4. select max(price) from books;	max 1 583	max 1 583	pass

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conclusion :

Successfully understood and run sql queries and implemented the given problem statement.

Problem Statement:

SCHEMA FOR Assignment No 2

Create following tables in MYSQL :

Customer(cust_no,cust_fname,cust_lname,cust_company,cust_addr,city,cust_phone) ordering(order_no,cust_no,ISBN,qty,odate); books(ISBN,title,unit_price,author_no,publisher_no,pub_year); authors(author_no,author_name,country) publisher(publisher_no,publisher_name,publisher_addr,year);

Note:Use referential integrity constraints while creating tables with on delete cascade options.

Create simple and complex view, index, Oracle Objects{sequence and synonym} based on above tables.

1. Insert at least 10 records in the customer table and insert other tables accordingly.
2. Display all customer details with city pune and mumbai and customer first name starting with 'p' or 'h'.
3. lists the number of different customer cities.(use of distinct)
4. Give 5% increase in price of the books with publishing year 2015. (use of update)
5. Delete customer details living in pune.
6. Find the names of authors living in India or Australia (use of UNION)
7. Find the publishers who are established in year 2015 as well as in 2016 (use of INTERSECT)
8. Find the book having maximum price and find titles of book having price between 300 and 400.(use of max and between)
9. Display all titles of books with price and published year in decreasing order of publishing year.
10. Display title,author_no and publisher_no of all books published in 2000,2004,2006. (use of IN)
11. Create a view showing the books and authors details. (COMPLEX VIEW)

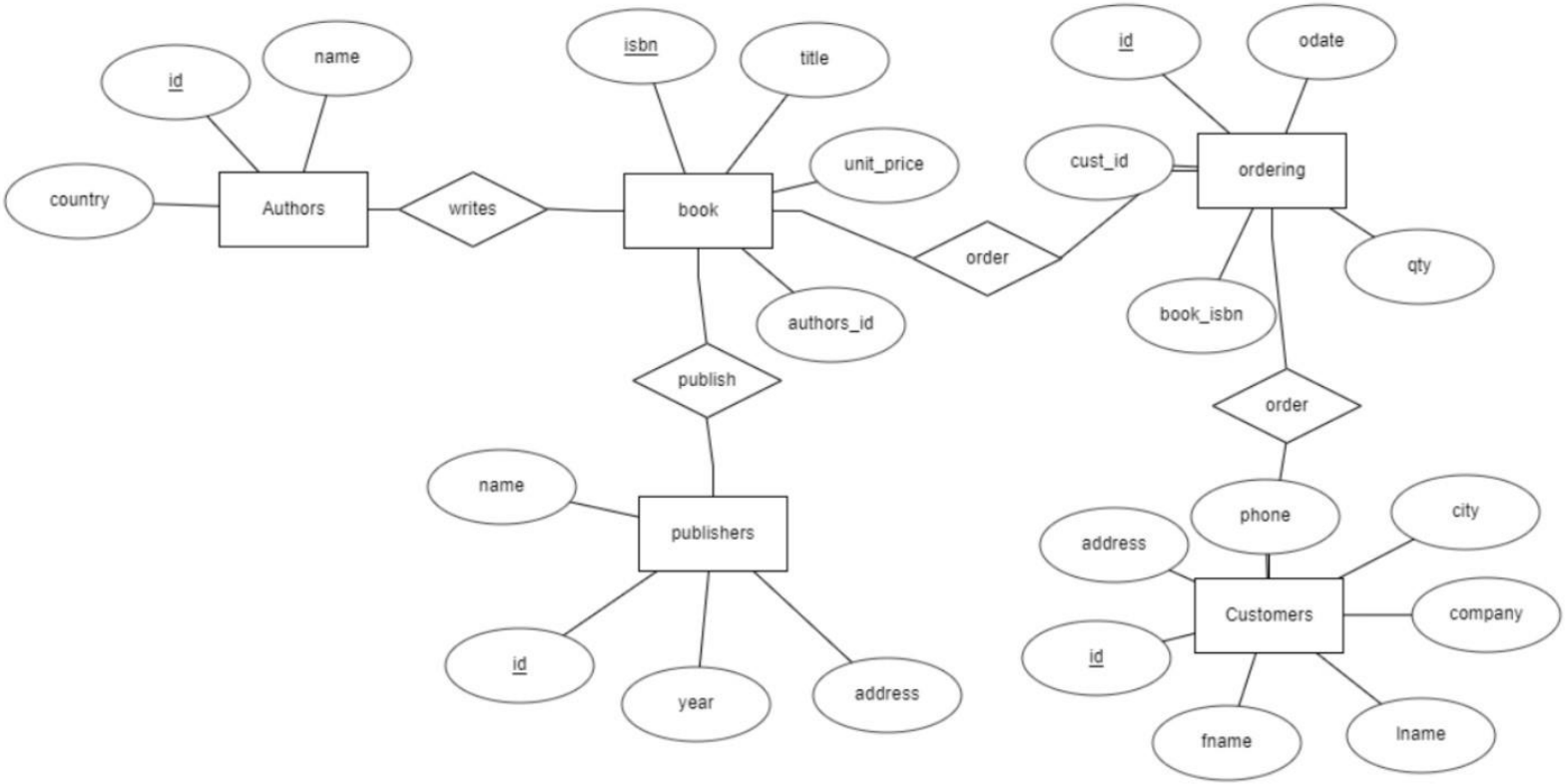
```sql
-- Rupesh Dharme
-- 31124
-- TE 01
-- K1
-- Assignment 02

create database assignment02;

show databases;

use assignment02;

create table customers (
    customer_id int not null auto_increment,
    first_name varchar(25) not null,
    last_name varchar(25),
    company varchar(25),
    customer_address varchar(255),
    city varchar(25),
    phone char(10),
    primary key(customer_id)
);

create table authors (
    author_id int not null auto_increment,
    author_name varchar(25) not null,
    author_country varchar(25),
    primary key (author_id)
);

create table publishers (
    publisher_id int not null auto_increment,
    publisher_name varchar(25) not null,
    publisher_address varchar(25) not null,
    create_year year not null,
    primary key (publisher_id)
);

create table books (
    isbn varchar(25) not null,
    title varchar(25) not null,
    unit_price int not null,
    author_id int not null,
    publisher_id int not null,
    pub_year year not null,
    primary key (isbn),
    foreign key (publisher_id) references publishers(publisher_id) on delete cascade,
    foreign key (author_id) references authors(author_id) on delete cascade
```

```
);

create table orderings (
    order_no int not null auto_increment,
    customer_id int not null,
    isbn varchar(25) not null,
    quantity int not null,
    order_date date not null,
    primary key (order_no),
    foreign key (customer_id) references customers(customer_id) on delete cascade,
    foreign key (isbn) references books(isbn) on delete cascade
);

-- #1. Insert at least 10 records in customer table and insert other tables accordingly.
insert into customers (first_name, last_name, company, customer_address, city, phone)
values ('Rupesh', 'Dharme', 'pict', 'akot', 'akot', '9075118158'),
       ('Omkar', 'Gaikwad', 'pict', 'pune', 'mumbai', '9999888855'),
       ('Dheeraj', 'Gonchikar', 'amazon', 'pune', 'pune', '9075118158'),
       ('Rohan', 'Khole', 'pict', 'pune', 'mumbai', '9955441122'),
       ('Gayatri', 'Godbole', 'google', 'pune', 'pune', '9075184158'),
       ('Aryan', 'C', 'pict', 'pune', 'mumbai', '9854625846'),
       ('Pushkar', 'Jain', 'pict', 'pune', 'pune', '9075184158'),
       ('Raj', 'Sharme', 'tcs', 'pune', 'pune', '9078418158'),
       ('Krishna', 'Gadam', 'coep', 'akot', 'akot', '9075118158'),
       ('Shreya', 'Verma', 'pict', 'pune', 'pune', '8475118158'),
       ('Harsh', 'Mohan', 'pict', 'pune', 'mumbai', '9084118158'),
       ('Priya', 'Khatri', 'pict', 'pune', 'mumbai', '9075848158'),
       ('Shruti', 'Shriwastav', 'pict', 'pune', 'aurangabad', '9075118158'),
       ('Hemant', 'Krishnan', 'pict', 'pune', 'mumbai', '9075118458');

insert into authors (author_name, author_country)
values ('R D Sharme', 'India'),
       ('H C Verma', 'India'),
       ('K P H', 'Australia');

insert into publishers (publisher_name, publisher_address, create_year)
values ('Prime', 'india', 2001),
       ('Mercury', 'USA', 1952),
       ('Akash', 'Australia', 1975),
       ('Chetan', 'india', 2017),
       ('Prime', 'india', 2015),
       ('Prime', 'india', 2016);


insert into books (isbn, title, unit_price, author_id, publisher_id, pub_year)
values ('85445822155', 'Title1', 350, 1, 2, 2006),
       ('85445822180', 'Title2', 20, 3, 1, 2015),
       ('85445822777', 'Title3', 240, 2, 1, 2000),
       ('85445866785', 'Title4', 320, 1, 2, 2004),
       ('85445822181', 'Title5', 555, 3, 1, 2015),
```

```
       ('85445825181', 'Title6', 75, 1, 2, 2015);

insert into orderings (customer_id, isbn, quantity, order_date)
values (5, '85445822180', 1, '2020-05-12'),
       (1, '85445822777', 3, '2020-04-15'),
       (9, '85445822155', 10, '2019-03-02');

-
- #2. Display all customer details with city pune and mumbai and customer first name starting
 with
-- #'p' or 'h'.
select * from customers where city = 'pune' or city = 'mumbai';
select * from customers where first_name like 'p%' or first_name like 'h%';

-- #3. lists the number of different customer cities.(use of distinct)
select distinct city from customers;
select distinct company from customers;

-- #4. Give 5% increase in price of the books with publishing year 2015. ( use of update)
update books
set unit_price = 105/100*unit_price
where pub_year = 2015;
select * from books;

-- #5. Delete customer details living in pune.
select * from customers;
delete from customers
where city = 'pune';


-- #6. Find the names of authors living in India or Australia (use of UNION)
select * from authors;

select author_name from authors
where author_country = 'India'
UNION
select author_name from authors
where author_country = 'australia';


-
- #7. Find the publishers who are established in year 2015 as well as in 2016 (use of INTERSE
CT)
select publisher_name from publishers
where create_year = '2015' or create_year = '2016';

SELECT publisher_name
FROM publishers
where create_year='2015'
INTERSECT
```

```sql
SELECT publisher_name
FROM publishers
where create_year='2016';

select max(unit_price) from books;


-
- 8. Find the book having maximum price and find titles of book having price between 300 and
-- 400.(use of max and between)
select * from books;

select title from books
where unit_price BETWEEN 300 and 400;

-
- 9. Display all titles of books with price and published year in decreasing order of publish
ing
-- year.
select title from books
where unit_price is not null AND
pub_year is not null ORDER BY pub_year desc;


-
- 10. Display title,author_no and publisher_no of all books published in 2000,2004,2006. (use
 of
-- IN)
select * from books;

select title, author_id, publisher_id from books
where pub_year in ('2000','2001','2015');

-- #11.Create view showing the books and authors details. (COMPLEX VIEW)

select * from books
inner join authors on books.author_id=authors.author_id;
```

Screenshots: from next page.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ordering
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city
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Customers
company
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MySQL 8.0 Command Line Client - Unicode

```
mysql> create database assignment02;
Query OK, 1 row affected (0.01 sec)

mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| assignment02       |
| information_schema |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
5 rows in set (0.00 sec)

mysql> use assignment02;
Database changed
mysql>
```

MySQL 8.0 Command Line Client - Unicode

```
mysql> create table customers (
    ->     customer_id int not null auto_increment,
    ->     first_name varchar(25) not null,
    ->     last_name varchar(25),
    ->     company varchar(25),
    ->     customer_address varchar(255),
    ->     city varchar(25),
    ->     phone char(10),
    ->     primary key(customer_id)
    -> );
Query OK, 0 rows affected (0.09 sec)

mysql> create table authors (
    ->     author_id int not null auto_increment,
    ->     author_name varchar(25) not null,
    ->     author_country varchar(25),
    ->     primary key (author_id)
    -> );
Query OK, 0 rows affected (0.07 sec)

mysql> create table publishers (
    ->     publisher_id int not null auto_increment,
    ->     publisher_name varchar(25) not null,
    ->     publisher_address varchar(25) not null,
    ->     create_year year not null,
    ->     primary key (publisher_id)
    -> );
Query OK, 0 rows affected (0.05 sec)

mysql> create table books (
    ->     isbn varchar(25) not null,
    ->     title varchar(25) not null,
    ->     unit_price int not null,
    ->     author_id int not null,
    ->     publisher_id int not null,
    ->     pub_year year not null,
    ->     primary key (isbn),
    ->     foreign key (publisher_id) references publishers(publisher_id) on delete cascade,
    ->     foreign key (author_id) references authors(author_id) on delete cascade
    -> );
Query OK, 0 rows affected (0.07 sec)

mysql>
```

Select MySQL 8.0 Command Line Client - Unicode

```
mysql> show tables;
+-----------------------+
| Tables_in_assignment02 |
+-----------------------+
| authors               |
| books                 |
| customers             |
| orderings             |
| publishers            |
+-----------------------+
5 rows in set (0.05 sec)

mysql> desc authors;
+----------------+-------------+------+-----+---------+----------------+
| Field          | Type        | Null | Key | Default | Extra          |
+----------------+-------------+------+-----+---------+----------------+
| author_id      | int         | NO   | PRI | NULL    | auto_increment |
| author_name    | varchar(25) | NO   |     | NULL    |                |
| author_country | varchar(25) | YES  |     | NULL    |                |
+----------------+-------------+------+-----+---------+----------------+
3 rows in set (0.04 sec)

mysql> desc customers;
+------------------+--------------+------+-----+---------+----------------+
| Field            | Type         | Null | Key | Default | Extra          |
+------------------+--------------+------+-----+---------+----------------+
| customer_id      | int          | NO   | PRI | NULL    | auto_increment |
| first_name       | varchar(25)  | NO   |     | NULL    |                |
| last_name        | varchar(25)  | YES  |     | NULL    |                |
| company          | varchar(25)  | YES  |     | NULL    |                |
| customer_address | varchar(255) | YES  |     | NULL    |                |
| city             | varchar(25)  | YES  |     | NULL    |                |
| phone            | char(10)     | YES  |     | NULL    |                |
+------------------+--------------+------+-----+---------+----------------+
7 rows in set (0.00 sec)

mysql>
```

MySQL 8.0 Command Line Client - Unicode

```
mysql> #1. Insert at least 10 records in customer table and insert other tables accordingly.
mysql> insert into customers (first_name, last_name, company, customer_address, city, phone)
    -> values ('Rupesh', 'Dharme', 'pict', 'akot', 'akot', '9075118158'),
    ->        ('Omkar', 'Gaikwad', 'pict', 'pune', 'mumbai', '9999888855'),
    ->        ('Dheeraj', 'Gonchikar', 'amazon', 'pune', 'pune', '9075118158'),
    ->        ('Rohan', 'Khole', 'pict', 'pune', 'mumbai', '9955441122'),
    ->        ('Gayatri', 'Godbole', 'google', 'pune', 'pune', '9075184158'),
    ->        ('Aryan', 'C', 'pict', 'pune', 'mumbai', '9854625846'),
    ->        ('Pushkar', 'Jain', 'pict', 'pune', 'pune', '9075184158'),
    ->        ('Raj', 'Sharme', 'tcs', 'pune', 'pune', '9078418158'),
    ->        ('Krishna', 'Gadam', 'coep', 'akot', 'akot', '9075118158'),
    ->        ('Shreya', 'Verma', 'pict', 'pune', 'pune', '8475118158'),
    ->        ('Harsh', 'Mohan', 'pict', 'pune', 'mumbai', '9084118158'),
    ->        ('Priya', 'Khatri', 'pict', 'pune', 'mumbai', '9075848158'),
    ->        ('Shruti', 'Shriwastav', 'pict', 'pune', 'aurangabad', '9075118158'),
    ->        ('Hemant', 'Krishnan', 'pict', 'pune', 'mumbai', '9075118458');
Query OK, 14 rows affected (0.03 sec)
Records: 14  Duplicates: 0  Warnings: 0

mysql> select * from customers;
+-------------+------------+------------+---------+------------------+------------+------------+
| customer_id | first_name | last_name  | company | customer_address | city       | phone      |
+-------------+------------+------------+---------+------------------+------------+------------+
|           1 | Rupesh     | Dharme     | pict    | akot             | akot       | 9075118158 |
|           2 | Omkar      | Gaikwad    | pict    | pune             | mumbai     | 9999888855 |
|           3 | Dheeraj    | Gonchikar  | amazon  | pune             | pune       | 9075118158 |
|           4 | Rohan      | Khole      | pict    | pune             | mumbai     | 9955441122 |
|           5 | Gayatri    | Godbole    | google  | pune             | pune       | 9075184158 |
|           6 | Aryan      | C          | pict    | pune             | mumbai     | 9854625846 |
|           7 | Pushkar    | Jain       | pict    | pune             | pune       | 9075184158 |
|           8 | Raj        | Sharme     | tcs     | pune             | pune       | 9078418158 |
|           9 | Krishna    | Gadam      | coep    | akot             | akot       | 9075118158 |
|          10 | Shreya     | Verma      | pict    | pune             | pune       | 8475118158 |
|          11 | Harsh      | Mohan      | pict    | pune             | mumbai     | 9084118158 |
|          12 | Priya      | Khatri     | pict    | pune             | mumbai     | 9075848158 |
|          13 | Shruti     | Shriwastav | pict    | pune             | aurangabad | 9075118158 |
|          14 | Hemant     | Krishnan   | pict    | pune             | mumbai     | 9075118458 |
+-------------+------------+------------+---------+------------------+------------+------------+
14 rows in set (0.01 sec)

mysql>
```

MySQL 8.0 Command Line Client - Unicode

```
mysql> insert into books (isbn, title, unit_price, author_id, publisher_id, pub_year)
    -> values ('85445822155', 'Title1', 350, 1, 2, 2006),
    ->        ('85445822180', 'Title2', 20, 3, 1, 2015),
    ->        ('85445822777', 'Title3', 240, 2, 1, 2000),
    ->        ('85445866785', 'Title4', 320, 1, 2, 2004),
    ->        ('85445822181', 'Title5', 555, 3, 1, 2015),
    ->        ('85445825181', 'Title6', 75, 1, 2, 2015);
Query OK, 6 rows affected (0.02 sec)
Records: 6  Duplicates: 0  Warnings: 0

mysql>
mysql> insert into orderings (customer_id, isbn, quantity, order_date)
    -> values (5, '85445822180', 1, '2020-05-12'),
    ->        (1, '85445822777', 3, '2020-04-15'),
    ->        (9, '85445822155', 10, '2019-03-02');
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> select * from books;
+-------------+--------+------------+-----------+--------------+----------+
| isbn        | title  | unit_price | author_id | publisher_id | pub_year |
+-------------+--------+------------+-----------+--------------+----------+
| 85445822155 | Title1 |        350 |         1 |            2 |     2006 |
| 85445822180 | Title2 |         20 |         3 |            1 |     2015 |
| 85445822181 | Title5 |        555 |         3 |            1 |     2015 |
| 85445822777 | Title3 |        240 |         2 |            1 |     2000 |
| 85445825181 | Title6 |         75 |         1 |            2 |     2015 |
| 85445866785 | Title4 |        320 |         1 |            2 |     2004 |
+-------------+--------+------------+-----------+--------------+----------+
6 rows in set (0.01 sec)

mysql> select * from orderings;
+----------+-------------+-------------+----------+------------+
| order_no | customer_id | isbn        | quantity | order_date |
+----------+-------------+-------------+----------+------------+
|        1 |           5 | 85445822180 |        1 | 2020-05-12 |
|        2 |           1 | 85445822777 |        3 | 2020-04-15 |
|        3 |           9 | 85445822155 |       10 | 2019-03-02 |
+----------+-------------+-------------+----------+------------+
3 rows in set (0.00 sec)

mysql>
```

MySQL 8.0 Command Line Client - Unicode

```
mysql> #2. Display all customer details with city pune and mumbai and customer first name starting with
mysql> #'p' or 'h'.
mysql> select * from customers where city = 'pune' or city = 'mumbai';
+-------------+------------+-----------+---------+------------------+--------+------------+
| customer_id | first_name | last_name | company | customer_address | city   | phone      |
+-------------+------------+-----------+---------+------------------+--------+------------+
|           2 | Omkar      | Gaikwad   | pict    | pune             | mumbai | 9999888855 |
|           3 | Dheeraj    | Gonchikar | amazon  | pune             | pune   | 9075118158 |
|           4 | Rohan      | Khole     | pict    | pune             | mumbai | 9955441122 |
|           5 | Gayatri    | Godbole   | google  | pune             | pune   | 9075184158 |
|           6 | Aryan      | C         | pict    | pune             | mumbai | 9854625846 |
|           7 | Pushkar    | Jain      | pict    | pune             | pune   | 9075184158 |
|           8 | Raj        | Sharme    | tcs     | pune             | pune   | 9078418158 |
|          10 | Shreya     | Verma     | pict    | pune             | pune   | 8475118158 |
|          11 | Harsh      | Mohan     | pict    | pune             | mumbai | 9084118158 |
|          12 | Priya      | Khatri    | pict    | pune             | mumbai | 9075848158 |
|          14 | Hemant     | Krishnan  | pict    | pune             | mumbai | 9075118458 |
+-------------+------------+-----------+---------+------------------+--------+------------+
11 rows in set (0.03 sec)

mysql> select * from customers where first_name like 'p%' or first_name like 'h%';
+-------------+------------+-----------+---------+------------------+--------+------------+
| customer_id | first_name | last_name | company | customer_address | city   | phone      |
+-------------+------------+-----------+---------+------------------+--------+------------+
|           7 | Pushkar    | Jain      | pict    | pune             | pune   | 9075184158 |
|          11 | Harsh      | Mohan     | pict    | pune             | mumbai | 9084118158 |
|          12 | Priya      | Khatri    | pict    | pune             | mumbai | 9075848158 |
|          14 | Hemant     | Krishnan  | pict    | pune             | mumbai | 9075118458 |
+-------------+------------+-----------+---------+------------------+--------+------------+
4 rows in set (0.00 sec)

mysql>
```

MySQL 8.0 Command Line Client - Unicode

```
mysql> -- #3. lists the number of different customer cities.(use of distinct)
mysql> select distinct city from customers;
+------------+
| city       |
+------------+
| akot       |
| mumbai     |
| aurangabad |
+------------+
3 rows in set (0.05 sec)

mysql> select distinct company from customers;
+---------+
| company |
+---------+
| pict    |
| coep    |
+---------+
2 rows in set (0.00 sec)

mysql>
```

Select MySQL 8.0 Command Line Client - Unicode

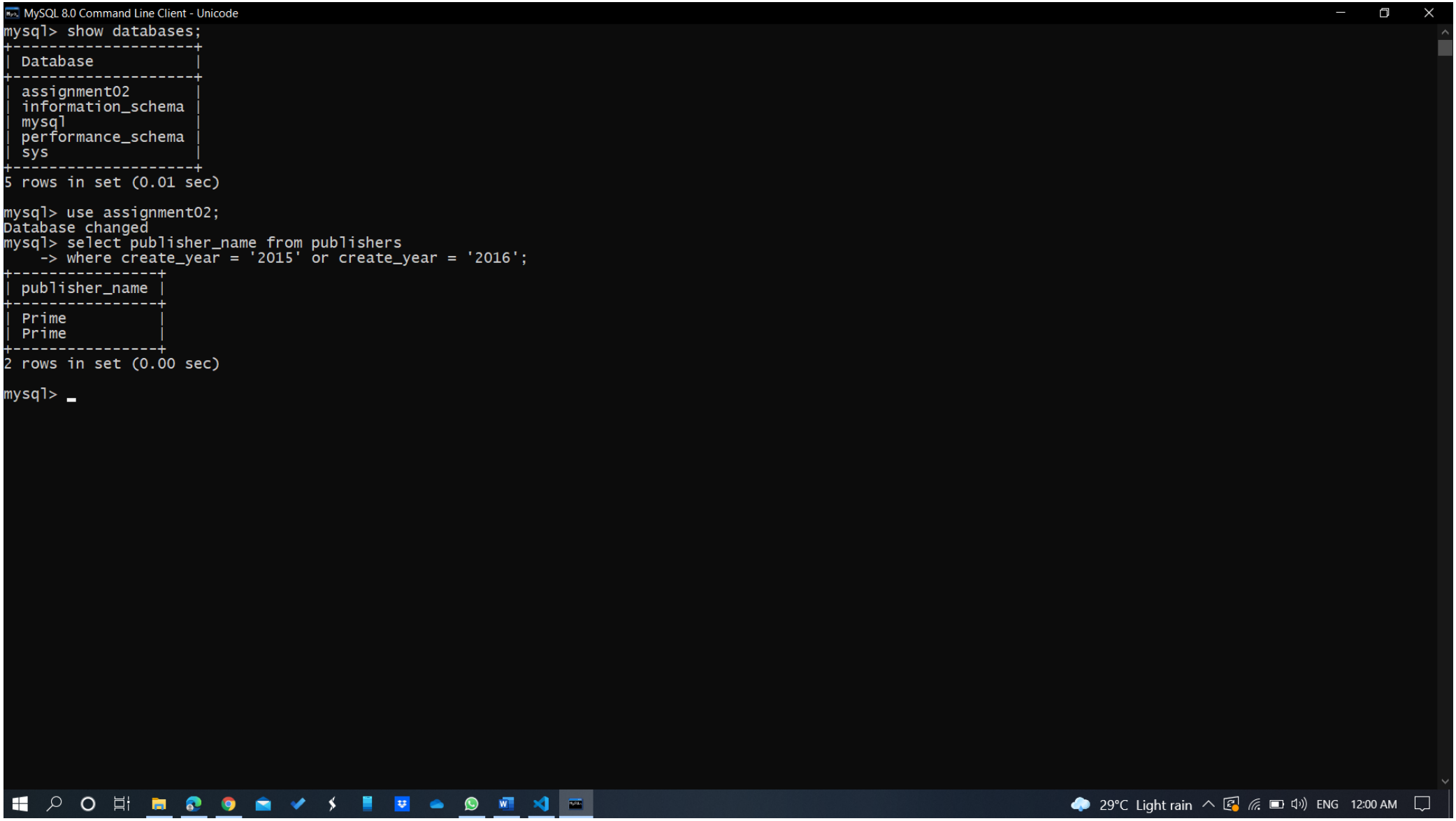
```
mysql> #4. Give 5% increase in price of the books with publishing year 2015. ( use of update)
mysql> select * from books;
+-------------+--------+------------+-----------+--------------+----------+
| isbn        | title  | unit_price | author_id | publisher_id | pub_year |
+-------------+--------+------------+-----------+--------------+----------+
| 85445822155 | Title1 |        350 |         1 |            2 |     2006 |
| 85445822180 | Title2 |         20 |         3 |            1 |     2015 |
| 85445822181 | Title5 |        555 |         3 |            1 |     2015 |
| 85445822777 | Title3 |        240 |         2 |            1 |     2000 |
| 85445825181 | Title6 |         75 |         1 |            2 |     2015 |
| 85445866785 | Title4 |        320 |         1 |            2 |     2004 |
+-------------+--------+------------+-----------+--------------+----------+
6 rows in set (0.00 sec)

mysql> update books
    -> set unit_price = 105/100*unit_price
    -> where pub_year = 2015;
Query OK, 3 rows affected (0.01 sec)
Rows matched: 3  Changed: 3  Warnings: 0

mysql> select * from books;
+-------------+--------+------------+-----------+--------------+----------+
| isbn        | title  | unit_price | author_id | publisher_id | pub_year |
+-------------+--------+------------+-----------+--------------+----------+
| 85445822155 | Title1 |        350 |         1 |            2 |     2006 |
| 85445822180 | Title2 |         21 |         3 |            1 |     2015 |
| 85445822181 | Title5 |        583 |         3 |            1 |     2015 |
| 85445822777 | Title3 |        240 |         2 |            1 |     2000 |
| 85445825181 | Title6 |         79 |         1 |            2 |     2015 |
| 85445866785 | Title4 |        320 |         1 |            2 |     2004 |
+-------------+--------+------------+-----------+--------------+----------+
6 rows in set (0.00 sec)

mysql>
```

MySQL 8.0 Command Line Client - Unicode

```
mysql> #5. Delete customer details living in pune.
mysql> select * from customers;
+-------------+------------+------------+---------+------------------+------------+------------+
| customer_id | first_name | last_name  | company | customer_address | city       | phone      |
+-------------+------------+------------+---------+------------------+------------+------------+
|           1 | Rupesh     | Dharme     | pict    | akot             | akot       | 9075118158 |
|           2 | Omkar      | Gaikwad    | pict    | pune             | mumbai     | 9999888855 |
|           3 | Dheeraj    | Gonchikar  | amazon  | pune             | pune       | 9075118158 |
|           4 | Rohan      | Khole      | pict    | pune             | mumbai     | 9955441122 |
|           5 | Gayatri    | Godbole    | google  | pune             | pune       | 9075184158 |
|           6 | Aryan      | C          | pict    | pune             | mumbai     | 9854625846 |
|           7 | Pushkar    | Jain       | pict    | pune             | pune       | 9075184158 |
|           8 | Raj        | Sharme     | tcs     | pune             | pune       | 9078418158 |
|           9 | Krishna    | Gadam      | coep    | akot             | akot       | 9075118158 |
|          10 | Shreya     | Verma      | pict    | pune             | pune       | 8475118158 |
|          11 | Harsh      | Mohan      | pict    | pune             | mumbai     | 9084118158 |
|          12 | Priya      | Khatri     | pict    | pune             | mumbai     | 9075848158 |
|          13 | Shruti     | Shriwastav | pict    | pune             | aurangabad | 9075118158 |
|          14 | Hemant     | Krishnan   | pict    | pune             | mumbai     | 9075118458 |
+-------------+------------+------------+---------+------------------+------------+------------+
14 rows in set (0.01 sec)

mysql> delete from customers
    -> where city = 'pune';
Query OK, 5 rows affected (0.03 sec)

mysql> select * from customers;
+-------------+------------+------------+---------+------------------+------------+------------+
| customer_id | first_name | last_name  | company | customer_address | city       | phone      |
+-------------+------------+------------+---------+------------------+------------+------------+
|           1 | Rupesh     | Dharme     | pict    | akot             | akot       | 9075118158 |
|           2 | Omkar      | Gaikwad    | pict    | pune             | mumbai     | 9999888855 |
|           4 | Rohan      | Khole      | pict    | pune             | mumbai     | 9955441122 |
|           6 | Aryan      | C          | pict    | pune             | mumbai     | 9854625846 |
|           9 | Krishna    | Gadam      | coep    | akot             | akot       | 9075118158 |
|          11 | Harsh      | Mohan      | pict    | pune             | mumbai     | 9084118158 |
|          12 | Priya      | Khatri     | pict    | pune             | mumbai     | 9075848158 |
|          13 | Shruti     | Shriwastav | pict    | pune             | aurangabad | 9075118158 |
|          14 | Hemant     | Krishnan   | pict    | pune             | mumbai     | 9075118458 |
+-------------+------------+------------+---------+------------------+------------+------------+
9 rows in set (0.00 sec)

mysql>
```

MySQL 8.0 Command Line Client - Unicode

```
mysql> #6. Find the names of authors living in India or Australia (use of UNION)
mysql> select * from authors;
+-----------+-------------+----------------+
| author_id | author_name | author_country |
+-----------+-------------+----------------+
|         1 | R D Sharme  | India          |
|         2 | H C Verma   | India          |
|         3 | K P H       | Australia      |
+-----------+-------------+----------------+
3 rows in set (0.01 sec)

mysql>
mysql> select author_name from authors
    -> where author_country = 'India'
    -> UNION
    -> select author_name from authors
    -> where author_country = 'australia';
+-------------+
| author_name |
+-------------+
| R D Sharme  |
| H C Verma   |
| K P H       |
+-------------+
3 rows in set (0.00 sec)

mysql>
mysql>
```


MySQL 8.0 Command Line Client - Unicode
mysql> show databases;
+--------------------+
| Database |
+--------------------+
| assignment02 |
| information_schema |
| mysql |
| performance_schema |
| sys |
+--------------------+
5 rows in set (0.01 sec)
mysql> use assignment02;
Database changed
mysql> select publisher_name from publishers
    -> where create_year = '2015' or create_year = '2016';
+----------------+
| publisher_name |
+----------------+
| Prime |
| Prime |
+----------------+
2 rows in set (0.00 sec)
mysql>
29°C Light rain
ENG
12:00 AM

MySQL 8.0 Command Line Client - Unicode

```
mysql> -- 8. Find the book having maximum price and find titles of book having price between 300 and
mysql> -- 400.(use of max and between)
mysql> select * from books;
+-------------+--------+------------+-----------+--------------+----------+
| isbn        | title  | unit_price | author_id | publisher_id | pub_year |
+-------------+--------+------------+-----------+--------------+----------+
| 85445822155 | Title1 |        350 |         1 |            2 |     2006 |
| 85445822180 | Title2 |         21 |         3 |            1 |     2015 |
| 85445822181 | Title5 |        583 |         3 |            1 |     2015 |
| 85445822777 | Title3 |        240 |         2 |            1 |     2000 |
| 85445825181 | Title6 |         79 |         1 |            2 |     2015 |
| 85445866785 | Title4 |        320 |         1 |            2 |     2004 |
+-------------+--------+------------+-----------+--------------+----------+
6 rows in set (0.01 sec)

mysql>
mysql> select title from books
    -> where unit_price BETWEEN 300 and 400;
+--------+
| title  |
+--------+
| Title1 |
| Title4 |
+--------+
2 rows in set (0.00 sec)

mysql>
```

MySQL 8.0 Command Line Client - Unicode

```
mysql> -- 9. Display all titles of books with price and published year in decreasing order of publishing
mysql> -- year.
mysql> select title from books
    -> where unit_price is not null AND
    -> pub_year is not null ORDER BY pub_year desc;
+--------+
| title  |
+--------+
| Title2 |
| Title5 |
| Title6 |
| Title1 |
| Title4 |
| Title3 |
+--------+
6 rows in set (0.00 sec)

mysql>
mysql>
mysql> -- 10. Display title,author_no and publisher_no of all books published in 2000,2004,2006. (use of
mysql> -- IN)
mysql> select * from books;
+-------------+--------+------------+-----------+--------------+----------+
| isbn        | title  | unit_price | author_id | publisher_id | pub_year |
+-------------+--------+------------+-----------+--------------+----------+
| 85445822155 | Title1 |        350 |         1 |            2 |     2006 |
| 85445822180 | Title2 |         21 |         3 |            1 |     2015 |
| 85445822181 | Title5 |        583 |         3 |            1 |     2015 |
| 85445822777 | Title3 |        240 |         2 |            1 |     2000 |
| 85445825181 | Title6 |         79 |         1 |            2 |     2015 |
| 85445866785 | Title4 |        320 |         1 |            2 |     2004 |
+-------------+--------+------------+-----------+--------------+----------+
6 rows in set (0.00 sec)

mysql>
mysql> select title, author_id, publisher_id from books
    -> where pub_year in ('2000','2001','2015');
+--------+-----------+--------------+
| title  | author_id | publisher_id |
+--------+-----------+--------------+
| Title2 |         3 |            1 |
| Title5 |         3 |            1 |
| Title3 |         2 |            1 |
| Title6 |         1 |            2 |
```

MySQL 8.0 Command Line Client - Unicode

```
mysql>
mysql> #11.Create view showing the books and authors details. (COMPLEX VIEW)
mysql>
mysql> select * from books
    -> inner join authors on books.author_id=authors.author_id;
+-------------+--------+------------+-----------+--------------+----------+-----------+-------------+----------------+
| isbn        | title  | unit_price | author_id | publisher_id | pub_year | author_id | author_name | author_country |
+-------------+--------+------------+-----------+--------------+----------+-----------+-------------+----------------+
| 85445822155 | Title1 |        350 |         1 |            2 |     2006 |         1 | R D Sharme  | India          |
| 85445822180 | Title2 |         21 |         3 |            1 |     2015 |         3 | K P H       | Australia      |
| 85445822181 | Title5 |        583 |         3 |            1 |     2015 |         3 | K P H       | Australia      |
| 85445822777 | Title3 |        240 |         2 |            1 |     2000 |         2 | H C Verma   | India          |
| 85445825181 | Title6 |         79 |         1 |            2 |     2015 |         1 | R D Sharme  | India          |
| 85445866785 | Title4 |        320 |         1 |            2 |     2004 |         1 | R D Sharme  | India          |
+-------------+--------+------------+-----------+--------------+----------+-----------+-------------+----------------+
6 rows in set (0.01 sec)

mysql>
```