OBJECTIVE: TO CREATE AND MANIPULATE VARIOUS DATABASE OBJECTS OF TABLE USING VIEWS.

LAB EXERCISE:

→ Creating a Database named 'lab5'.

CREATE DATABASE lab5; USE lab5;

→ Creating Tables and Inserting data.

1) Customer Table:

= CREATE TABLE customer (cid INT, name VARCHAR(50), age INT, address VARCHAR(50), salary DECIMAL(10, 2));

2) Order Table:

= CREATE TABLE 'order' (oid INT, order_date DATETIME, cid INT, amount DECIMAL(10, 2));

3) Employee Table:

= CREATE TABLE employee (eid INT, ename VARCHAR(50), job VARCHAR(50), did INT, salary DECIMAL(10, 2));

4) Department Table:

=CREATE TABLE department (did INT, dname VARCHAR(50), location VARCHAR(50));

INSERTING DATA:

1) Customer Table:

= INSERT INTO customer VALUES (1, 'ram', 32, 'kathmandu', 2000.00), (2, 'shyam', 25, 'patan', 1500.00), (3, 'hari', 23, 'dharan', 2000.00), (4, 'gopal', 25, 'pokhara', 6500.00), (5, 'sita', 27, 'bhaktapur', 8500.00), (6, 'gita', 22, 'illam', 4500.00), (7, 'rita', 24, 'banepa', 10000.00);

2) Order Table:

= INSERT INTO order VALUES (102, '2015-10-08 00:00:00', 3, 3000), (100, '2014-10-08 00:00:00', 3, 1500), (101, '2014-11-20 00:00:00', 2, 1560), (103, '2013-05-20 00:00:00', 4, 2060);

3) Employee Table:

= INSERT INTO employee VALUES (1, 'arjun', 'AP', 1, 10000.00), (2, 'rabi', 'JP', 2, 12000.00), (3, 'rohan', 'AP', 2, 15000.00), (4, 'krishna', 'AP', 1, 20000.00);

4) Department Table:

```
= INSERT INTO department VALUES (1, 'accounting', 'kathmandu'), (2, 'sales', 'patan'), (3, 'research', 'banepa'), (4, 'operations', 'bhaktapur');
```

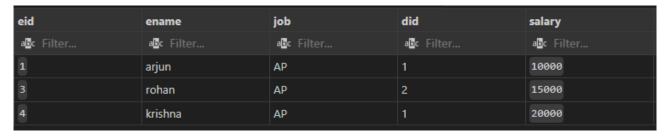
Problems:

1) Use view to display only the details of employees who are AP.

```
CREATE VIEW ap_employees
AS (
    SELECT *
    FROM employee
    WHERE job = 'AP'
);
```

SELECT *

FROM ap_employees;



2) Use view to display only name, salary and department of employee whose salary is greater than 10000.

```
CREATE VIEW salary_view
AS (
    SELECT ename, salary, dname
    FROM employee
    INNER JOIN department
    ON salary > 10000
);

SELECT *
FROM salary_view;
```

ename	salary	dname
abc Filter	abc Filter	abc Filter
krishna	20000	accounting
rohan	15000	accounting
rabi	12000	accounting
krishna	20000	sales
rohan	15000	sales
rabi	12000	sales
krishna	20000	resarch
rohan	15000	resarch
rabi	12000	resarch
krishna	20000	operations
rohan	15000	operations
rabi	12000	operations

3) Use view to display name, age of customer as well as order date and amount

CREATE VIEW customer_view AS

SELECT c.name, c.age, o.order_date, o.amount

FROM customer AS c

INNER JOIN 'order' AS o

ON c.cid = o.cid;

SELECT *

FROM customer_view;

name	age	order_date	amount
abc Filter	abc Filter	abc Filter	abc Filter
shyam	25	2014-11-20T00:00:00.000Z	1560
hari	23	2014-10-08T00:00:00.000Z	1500
hari	23	2015-10-08T00:00:00.000Z	3000
gopal	25	2013-05-20T00:00:00.000Z	2060

4) Update view of Q.N.3 to include address and salary of customer.

ALTER VIEW customer_view AS

SELECT c.name, c.age, c.address, c.salary, o.order_date, o.amount

FROM customer AS c
INNER JOIN `order` AS o
ON c.cid = o.cid;

SELECT *

FROM customer_view;

name	age	address	salary	order_date	amount
abc Filter	abc Filter				
shyam	25	patan	1500	2014-11-20T00:00:00.000Z	1560
hari	23	dharan	2000	2014-10-08T00:00:00.000Z	1500
hari	23	dharan	2000	2015-10-08T00:00:00.000Z	3000
gopal	25	pokhara	6500	2013-05-20T00:00:00.000Z	2060

5) Again, update view of Q.N.4 to include only salary greater than 5000.

ALTER VIEW customer_view AS

SELECT c.name, c.age, c.address, c.salary, o.order_date, o.amount

FROM customer AS c

INNER JOIN 'order' AS o

ON c.cid = o.cid

WHERE salary > 5000;

SELECT *

FROM customer_view;

name	age	address	salary	order_date	amount
abc Filter	als: Filter	abc Filter	a <mark>b</mark> c Filter	abc Filter	abc Filter
gopal	25	pokhara	6500	2013-05-20T00:00:00.000Z	2060