DATABASE ASSIGNMENT 8

Vehicle

Vid Vname Price desc

1 Activa 80000 ksldjfjksj

2 Santro 8,00000 kdjfkjsd

3 Motor bike 100000 fdkdfj

customer

Custid Cname address

1 Nilima Pimpari

2 Ganesh Pune

3 Pankaj Mumbai

salesman

Sid Sname adress

10 Rajesh mumbai

11 Seema Pune

13 Rakhi pune

cust-vehicle (customer is buying Many vehicle and 1 vehicle can be bought by many customers)

Custid Vid Sid Buy_price

1 1 10 75000

1 2 10 7,90,000

2 3 11 80000

3 3 11 75000

3 2 10 8,00000

1.create all given tables

```
mysql> select * from vehicle;
+-----+------------+--------+-------------+
| vid | vname      | price  | description |
+-----+------------+--------+-------------+
|   1 | Activa     |  80000 | Petrol      |
|   2 | Santro     | 800000 | disesl      |
|   3 | Motor Bike | 100000 | Electric    |
+-----+------------+--------+-------------+
3 rows in set (0.00 sec)

mysql> select * from customer;
+--------+--------+---------+
| custid | canme  | address |
+--------+--------+---------+
|      1 | Nilima | Pimpari |
|      2 | Ganesh | Pune    |
|      3 | Pankaj | Mumbai  |
+--------+--------+---------+
3 rows in set (0.00 sec)

mysql> select * from salesman;
+-----+--------+---------+
| sid | sname  | Address |
+-----+--------+---------+
|  10 | Rajesh | Mumbai  |
|  11 | Seema  | Pune    |
|  13 | Rakhi  | Pune    |
+-----+--------+---------+
3 rows in set (0.00 sec)

mysql> select * from cust_vehicle;
+--------+------+------+-----------+
| custid | vid  | sid  | Buy_price |
+--------+------+------+-----------+
|      1 |    1 |   10 |     75000 |
|      2 |    3 |   11 |     80000 |
|      3 |    3 |   11 |     75000 |
|      3 |    2 |   10 |    800000 |
+--------+------+------+-----------+
```

2. create index on vehicle table based on price

```
ql> create index index_vec
 -> on vehicle (price);
```

```
mysql> SHOW INDEXES from vehicle;
+---------+------------+-----------+--------------+-------------+-----------+-------------+----------+--------+------+------------+---------+---------------+---------+------------+
| Table   | Non_unique | Key_name  | Seq_in_index | Column_name | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_comment | Visible | Expression |
+---------+------------+-----------+--------------+-------------+-----------+-------------+----------+--------+------+------------+---------+---------------+---------+------------+
| vehicle |          0 | PRIMARY   |            1 | vid         | A         |           2 |     NULL |   NULL |      | BTREE      |         |               | YES     | NULL       |
| vehicle |          1 | index_vec |            1 | price       | A         |           3 |     NULL |   NULL | YES  | BTREE      |         |               | YES     | NULL       |
+---------+------------+-----------+--------------+-------------+-----------+-------------+----------+--------+------+------------+---------+---------------+---------+------------+
```

3. find all customer name,vehicle name, salesman name, discount earn by all customer

```
mysql> select c.canme, v.vname,s.sname,v.price,cv.buy_price,(v.price-cv.buy_price)discount from cust_vehicle cv inner join customer c on c.custid=cv.custid
    -> inner join vehicle v on v.vid=cv.vid
    -> inner join salesman s on s.sid=cv.sid;
+--------+------------+--------+--------+-----------+----------+
| canme  | vname      | sname  | price  | buy_price | discount |
+--------+------------+--------+--------+-----------+----------+
| Nilima | Activa     | Rajesh |  80000 |     75000 |     5000 |
| Ganesh | Motor Bike | Seema  | 100000 |     80000 |    20000 |
| Pankaj | Motor Bike | Seema  | 100000 |     75000 |    25000 |
| Pankaj | Santro     | Rajesh | 800000 |    800000 |        0 |
+--------+------------+--------+--------+-----------+----------+
```

4. find all customer name,vehicle name,salesman name for all salesman who stays in pune

```
mysql>    select c.canme, v.vname,s.sname
    ->      from cust_vehicle cv inner join customer c
    ->      on c.custid=cv.custid
    ->      inner join vehicle v on v.vid=cv.vid
    ->      inner join salesman s on s.sid=cv.sid
    ->   and s.Address='pune';
+--------+------------+-------+
| canme  | vname      | sname |
+--------+------------+-------+
| Ganesh | Motor Bike | Seema |
| Pankaj | Motor Bike | Seema |
+--------+------------+-------+
2 rows in set (0.00 sec)
```

5. find how many customers bought motor bike

```
ysql>   select count(*)vcount,vname
   ->     from cust_vehicle cv
   ->     inner join vehicle v on v.vid=cv.vid
   ->     and v.vname='Motor Bike';
--------+------------+
 vcount | vname      |
--------+------------+
      2 | Motor Bike |
--------+------------+
 row in set (0.00 sec)
```

6. create a view find_discount which displays output

-------to create view

create view find_discount

as

select cname,vname,price,buying_price,price-buying_price “discount”

from customer c inner join cust_vehicle cv on c.custid=cv.cid inner join vehicle v on

v.vid=cv.vid

--------to display discount

select * from find_discount;

```
mysql> create view find_discount
    -> as
    ->  select c.canme, v.vname,v.price,cv.buy_price,
    ->      (v.price-cv.buy_price)discount
    ->      from cust_vehicle cv inner join customer c
    ->      on c.custid=cv.custid
    ->      inner join vehicle v on v.vid=cv.vid;
Query OK, 0 rows affected (0.08 sec)

mysql> select * from find_discount;
+--------+------------+--------+-----------+----------+
| canme  | vname      | price  | buy_price | discount |
+--------+------------+--------+-----------+----------+
| Nilima | Activa     |  80000 |     75000 |     5000 |
| Ganesh | Motor Bike | 100000 |     80000 |    20000 |
| Pankaj | Motor Bike | 100000 |     75000 |    25000 |
| Pankaj | Santro     | 800000 |    800000 |        0 |
+--------+------------+--------+-----------+----------+
4 rows in set (0.00 sec)
```

7. find all customer name, vehicle name, salesman name, discount earn by all customer

```
mysql> select c.canme, v.vname,s.sname,v.price,cv.buy_price,(v.price-cv.buy_price)discount from cust_vehicle cv inner join customer c on c.custid=cv.custid
    -> inner join vehicle v on v.vid=cv.vid
    -> inner join salesman s on s.sid=cv.sid;
+--------+------------+--------+--------+-----------+----------+
| canme  | vname      | sname  | price  | buy_price | discount |
+--------+------------+--------+--------+-----------+----------+
| Nilima | Activa     | Rajesh |  80000 |     75000 |     5000 |
| Ganesh | Motor Bike | Seema  | 100000 |     80000 |    20000 |
| Pankaj | Motor Bike | Seema  | 100000 |     75000 |    25000 |
| Pankaj | Santro     | Rajesh | 800000 |    800000 |        0 |
+--------+------------+--------+--------+-----------+----------+
```

8. create view my_hr to display empno,ename,job,comm for all employees who earn Commission

```
mysql> where comm is not null and comm!=0;^C
mysql> CREATE VIEW my_hr
    -> as
    -> select empno, ename,job ,comm
    -> from emp
    -> where comm is not null and comm!=0;
Query OK, 0 rows affected (0.06 sec)

mysql> select * from my_hr;
+-------+--------+----------+---------+
| empno | ename  | job      | comm    |
+-------+--------+----------+---------+
|  7499 | ALLEN  | SALESMAN |  300.00 |
|  7521 | WARD   | SALESMAN |  500.00 |
|  7654 | MARTIN | SALESMAN | 1400.00 |
+-------+--------+----------+---------+
3 rows in set (0.00 sec)
```

9. create view mgr30 to display all employees from department 30

```
sql> create view mgr30
  -> as
  -> select *from emp
  -> where deptno=30;
ery OK, 0 rows affected (0.06 sec)
```

```
mysql> select * from mgr30;
+-------+--------+----------+------+------------+---------+---------+--------+
| EMPNO | ENAME  | JOB      | MGR  | HIREDATE   | SAL     | COMM    | DEPTNO |
+-------+--------+----------+------+------------+---------+---------+--------+
|  7499 | ALLEN  | SALESMAN | 7698 | 1981-02-20 | 1600.00 |  300.00 |     30 |
|  7521 | WARD   | SALESMAN | 7698 | 1981-02-22 | 1250.00 |  500.00 |     30 |
|  7654 | MARTIN | SALESMAN | 7698 | 1981-09-28 | 1250.00 | 1400.00 |     30 |
|  7698 | BLAKE  | MANAGER  | 7839 | 1981-05-01 | 2850.00 |    NULL |     30 |
|  7844 | TURNER | SALESMAN | 7698 | 1981-09-08 | 1500.00 |    0.00 |     30 |
|  7900 | JAMES  | CLERK    | 7698 | 1981-12-03 |  950.00 |    NULL |     30 |
+-------+--------+----------+------+------------+---------+---------+--------+
6 rows in set (0.00 sec)
```

insert

10. insert 3 employees in view mgr30 check whether insertion is possible

```
Query OK, 1 row affected (0.00 sec)

mysql> select * from mgr30;
+-------+--------+----------+------+------------+---------+---------+--------+
| EMPNO | ENAME  | JOB      | MGR  | HIREDATE   | SAL     | COMM    | DEPTNO |
+-------+--------+----------+------+------------+---------+---------+--------+
|  1000 | HARISH | IT       | 7777 | 2024-06-05 | 1800.00 |    NULL |     30 |
|  1001 | AJAY   | IT       | 7777 | 2024-06-05 | 2500.00 |    NULL |     30 |
|  1002 | PIYUSH | MANAGER  | 7777 | 2024-06-05 | 4200.00 |    NULL |     30 |
|  7499 | ALLEN  | SALESMAN | 7698 | 1981-02-20 | 1600.00 |  300.00 |     30 |
|  7521 | WARD   | SALESMAN | 7698 | 1981-02-22 | 1250.00 |  500.00 |     30 |
|  7654 | MARTIN | SALESMAN | 7698 | 1981-09-28 | 1250.00 | 1400.00 |     30 |
|  7698 | BLAKE  | MANAGER  | 7839 | 1981-05-01 | 2850.00 |    NULL |     30 |
|  7844 | TURNER | SALESMAN | 7698 | 1981-09-08 | 1500.00 |    0.00 |     30 |
|  7900 | JAMES  | CLERK    | 7698 | 1981-12-03 |  950.00 |    NULL |     30 |
+-------+--------+----------+------+------------+---------+---------+--------+

9 rows in set (0.00 sec)
```

11. insert 3 records in dept and display all records from dept

```
mysql> create view dview
    -> as
    -> select * from dept
    -> ;
Query OK, 0 rows affected (0.10 s
```

```
mysql> insert into dview values(50,'IT','CALIFORNIA');
Query OK, 1 row affected (0.00 sec)

mysql> insert into dview values(60,'TECH','QUEENS');
Query OK, 1 row affected (0.00 sec)

mysql> insert into dview values(70,'ELECTICAL','TEXAS');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from dview;
+--------+------------+------------+
| DEPTNO | DNAME      | LOC        |
+--------+------------+------------+
|     10 | ACCOUNTING | NEW YORK   |
|     20 | RESEARCH   | DALLAS     |
|     30 | SALES      | CHICAGO    |
|     40 | OPERATIONS | BOSTON     |
|     50 | IT         | CALIFORNIA |
|     60 | TECH       | QUEENS     |
|     70 | ELECTICAL  | TEXAS      |
+--------+------------+------------+
7 rows in set (0.00 sec)

mysql>
```

12. use rollback command check what happens

13. do the following

insert row in emp with empno 100

insert row in emp with empno 101

insert row in emp with empno 102

add savepoint A

insert row in emp with empno 103

insert row in emp with empno 104

insert row in emp with empno 105

add savepoint B

delete emp with empno 100

delete emp with emp no 104

rollback upto svaepoint B

```
mysql> rollback to savepoint B;
Query OK, 0 rows affected (0.00 sec)

mysql> select * from demo;
+------+-------+
| x    | empno |
+------+-------+
|    1 |   100 |
|    2 |   101 |
|    3 |   102 |
|    4 |   103 |
|    5 |   104 |
|    6 |   105 |
+------+-------+
6 rows in set (0.00 sec)
```

check what all records will appear in employee table

rollback upto A

```
mysql> rollback to savepoint A;
Query OK, 0 rows affected (0.00 sec)

mysql> select * from demo;
+------+-------+
| x    | empno |
+------+-------+
|    1 |   100 |
|    2 |   101 |
|    3 |   102 |
+------+-------+
3 rows in set (0.00 sec)
```

check what all records will appear in employee table

commit all changes

check what all records will appear in employee table

check whether you can roll back the contents.

14. create a procedure getMin(deptno,minsal) to find minimum salary of given table

```
ysql> create view getmin
    -> as
    -> select deptno,min(sal)
    -> from emp
    -> group by deptno;
Query OK, 0 rows affected (0.02 sec)

ysql> select * from getmin;
--------+----------+
 deptno | min(sal) |
--------+----------+
     30 |   950.00 |
     20 |   800.00 |
     10 |  1300.00 |
--------+----------+
```

```
mysql> select min(s) from getmin;
+--------+
| min(s) |
+--------+
| 800.00 |
+--------+
1 row in set (0.00 sec)
```