

## Assignment 3

1. Create all given tables

```
mysql> use DB
Database changed
mysql> select * from vehicle;
+-----+-----+-----+-----+
| vid | vname      | price | cdesc      |
+-----+-----+-----+-----+
| 1   | Aactiva    | 80000 | ksdkjjs    |
| 2   | Santro     | 800000 | jhghgfjhj  |
| 3   | Motor bike | 100000 | hghgfghf   |
+-----+-----+-----+-----+
3 rows in set (0.19 sec)

mysql> select * from customer;
+-----+-----+-----+
| custid | cname      | address |
+-----+-----+-----+
| 1      | Nilima     | Pimpri  |
| 2      | Ganesh     | Pune    |
| 3      | Pankaj     | Mumbai  |
+-----+-----+-----+
3 rows in set (0.09 sec)

mysql> select * from cust_vehicle;
+-----+-----+-----+-----+
| custid | vid | sid | buy_price |
+-----+-----+-----+-----+
| 1      | 1   | 10  | 75000     |
| 1      | 2   | 10  | 790000    |
| 2      | 3   | 11  | 80000     |
| 3      | 3   | 11  | 75000     |
| 3      | 2   | 10  | 800000    |
+-----+-----+-----+-----+
5 rows in set (0.09 sec)

mysql> select * from salesman;
+-----+-----+-----+
| sid | sname      | address |
+-----+-----+-----+
| 10  | Rajesh     | Mumbai  |
| 11  | Seema      | Pune    |
| 13  | Rakhi      | Pune    |
+-----+-----+-----+
3 rows in set (0.05 sec)
```

2. create index on vehicle table based on price

```
mysql> create index price on vehicle(price);
Query OK, 0 rows affected (5.25 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> show index 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	3	NULL	NULL		BTREE			YES	NULL
vehicle	1	price	1	price	A	3	NULL	NULL	YES	BTREE			YES	NULL

2 rows in set (1.03 sec)

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

```
mysql> select c.cname, v.vname, s.sname, round((((price-buy_price)/price)*100),2) DISCOUNT
-> from cust_vehicle cv, customer c, vehicle v, salesman s
-> where cv.custid=c.custid and cv.vid=v.vid and cv.sid=s.sid;
```

cname	vname	sname	DISCOUNT
Nilima	Activa	Rajesh	6.25
Nilima	Santro	Rajesh	1.25
Ganesh	Motor bike	Seema	20.00
Pankaj	Motor bike	Seema	25.00
Pankaj	Santro	Rajesh	0.00

5 rows in set (0.00 sec)

```
mysql> select cname, vname, sname, (v.price - cv.buy_price) "Discount"
-> from customer c, vehicle v, salesman3 s, cust_vehicle cv
-> where cv.custid = c.custid and cv.vid = v.vid and cv.sid = s.sid;
```

cname	vname	sname	Discount
Nilima	Activa	Rajesh	5000.00
Nilima	Santro	Rajesh	10000.00
Pankaj	Santro	Rajesh	0.00
Ganesh	Motor bike	Seema	20000.00
Pankaj	Motor bike	Seema	25000.00

5 rows in set (0.03 sec)

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

```
mysql> select c.cname, v.vname, s.sname
-> from customer c, vehicle v, salesman s, cust_vehicle adr
-> where adr.custid=c.custid and adr.vid=v.vid and adr.sid=s.sid and s.address='Pune';
```

cname	vname	sname
Ganesh	Motor bike	Seema
Pankaj	Motor bike	Seema

2 rows in set (0.12 sec)

5. find how many customers bought motor bike

```
mysql> select *
-> from vehicle v left join cust_vehicle cv
-> on v.vid = cv.vid
-> where v.vname= 'motor bike';
```

vid	vname	price	cdesc	custid	vid	sid	buy_price
3	Motor bike	100000	hghgfghf	2	3	11	80000
3	Motor bike	100000	hghgfghf	3	3	11	75000

2 rows in set (0.48 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 cname,vname,price,buy_price,price-buy_price "discount"
-> from customer c inner join cust_vehicle cv on c.custid=cv.custid inner join vehicle v on
    v.vid=cv.vid;
Query OK, 0 rows affected (0.04 sec)

mysql> select * from find_discount;
+-----+-----+-----+-----+-----+
| cname | vname   | price  | buy_price | discount |
+-----+-----+-----+-----+-----+
| Nilima | Aactiva | 80000.00 | 75000.00 | 5000.00 |
| Nilima | Santro  | 80000.00 | 79000.00 | 1000.00 |
| Ganesh | Motor bike | 10000.00 | 8000.00 | 2000.00 |
| Pankaj | Santro  | 80000.00 | 80000.00 | 0.00 |
| Pankaj | Motor bike | 10000.00 | 7500.00 | 2500.00 |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

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

```
mysql> select cname, vname, sname, (v.price - cv.buy_price) "Discount"
-> from customer c, vehicle v, salesman3 s, cust_vehicle cv
-> where cv.custid = c.custid and cv.vid = v.vid and cv.sid = s.sid;
+-----+-----+-----+-----+
| cname | vname   | sname  | Discount |
+-----+-----+-----+-----+
| Nilima | Aactiva | Rajesh | 5000.00 |
| Nilima | Santro  | Rajesh | 1000.00 |
| Pankaj | Santro  | Rajesh | 0.00 |
| Ganesh | Motor bike | Seema | 2000.00 |
| Pankaj | Motor bike | Seema | 2500.00 |
+-----+-----+-----+-----+
5 rows in set (0.03 sec)
```

8. create view my\_hr to display empno,ename,job,comm for all employees who earn commission

```
mysql> create view my_hr
-> as
-> select empno, ename, job, comm
-> from emp
-> where comm > 0;
Query OK, 0 rows affected (0.02 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
7062	REVATI	OPERATIONS	200.00
8109	RAJAN	OPERATIONS	200.00

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

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

```
mysql> create view mgr30
-> as
-> select *
-> from emp
-> where deptno = 30;
Query OK, 0 rows affected (0.03 sec)

mysql> select * from mgr30;
```

EMPNO	ENAME	job	MGR	HIREDATE	SAL	COMM	DEPTNO
7499	ALLEN	SALESMAN	7698	1981-02-20	1840.00	300.00	30
7521	WARD	SALESMAN	7698	1981-02-22	1437.50	500.00	30
7654	MARTIN	SALESMAN	7698	1981-09-28	1437.50	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)
```



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

```
mysql> insert into mgr30 values (1111, 'Sahil', 'MANAGER', '7839', '2023-04-16', 10127, 100, 30);
Query OK, 1 row affected (0.05 sec)

mysql> insert into mgr30 values (1112, 'ABC', 'MANAGER', '7839', '2023-04-16', 5555, 100, 30);
Query OK, 1 row affected (0.01 sec)

mysql> insert into mgr30 values (1113, 'XYZ', 'MANAGER', '7839', '2023-04-16', 6666, 100, 30);
Query OK, 1 row affected (0.03 sec)

mysql> select * from mgr30;
```

EMPNO	ENAME	job	MGR	HIREDATE	SAL	COMM	DEPTNO
7499	ALLEN	SALESMAN	7698	1981-02-20	1840.00	300.00	30
7521	WARD	SALESMAN	7698	1981-02-22	1437.50	500.00	30
7654	MARTIN	SALESMAN	7698	1981-09-28	1437.50	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
1111	Sahil	MANAGER	7839	2023-04-16	10127.00	100.00	30
1112	ABC	MANAGER	7839	2023-04-16	5555.00	100.00	30
1113	XYZ	MANAGER	7839	2023-04-16	6666.00	100.00	30

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

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

```
mysql> insert into dept values (50, 'DATA ENTRY', 'USA');
Query OK, 1 row affected (0.02 sec)

mysql> insert into dept values (60, 'MARKETING', 'SEATTLE');
Query OK, 1 row affected (0.05 sec)

mysql> insert into dept values (70, 'SECURITY', 'BERLIN');
Query OK, 1 row affected (0.21 sec)

mysql> SELECT * FROM DEPT;
```

DEPTNO	DNAME	LOC
10	ACCOUNTING	NEW YORK
20	RESEARCH	DALLAS
30	SALES	CHICAGO
40	OPERATIONS	BOSTON
50	DATA ENTRY	USA
60	MARKETING	SEATTLE
70	SECURITY	BERLIN

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

12. use rollback command check what happens

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

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 savepoint B

check what all records will appear in employee table

rollback upto A

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.

```

mysql> set autocommit = 0;
Query OK, 0 rows affected (0.00 sec)

mysql> insert into emp values (100, 'Deepak', 'Accounting', '1234', '2023-03-16', 10000, 50, 10);
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp values (101, 'kelvin', 'sales', '1235', '2023-03-16', 10000, 50, 10);
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp values (102, 'Ben', 'operations', '4321', '2023-03-16', 10000, 50, 10);
Query OK, 1 row affected (0.00 sec)

mysql> select * from emp;
+-----+-----+-----+-----+-----+-----+-----+-----+
| EMPNO | ENAME | job      | MGR  | HIREDATE | SAL      | COMM    | DEPTNO |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 7369 | SMITH | CLERK    | 7902 | 1980-12-17 | 800.00   | NULL    | 20     |
| 7499 | ALLEN | SALESMAN | 7698 | 1981-02-20 | 1840.00  | 300.00  | 30     |
| 7521 | WARD  | SALESMAN | 7698 | 1981-02-22 | 1437.50  | 500.00  | 30     |
| 7566 | JONES | MANAGER  | 7839 | 1981-04-02 | 2975.00  | NULL    | 20     |
| 7654 | MARTIN | SALESMAN | 7698 | 1981-09-28 | 1437.50  | 1400.00 | 30     |
| 7698 | BLAKE | MANAGER  | 7839 | 1981-05-01 | 2850.00  | NULL    | 30     |
| 7782 | CLARK | MANAGER  | 7777 | 1981-06-09 | 2817.50  | NULL    | 10     |
| 7788 | SCOTT | ANALYST  | 7566 | 1982-12-09 | 3000.00  | NULL    | 20     |
| 7839 | KING  | MANAGER  | 7777 | 1981-11-17 | 5750.00  | NULL    | 10     |
| 7844 | TURNER | SALESMAN | 7698 | 1981-09-08 | 1500.00  | 0.00    | 30     |
| 7876 | ADAMS | CLERK    | 7788 | 1983-01-12 | 1100.00  | NULL    | 20     |
| 7900 | JAMES | CLERK    | 7698 | 1981-12-03 | 950.00   | NULL    | 30     |
| 7902 | FORD  | ANALYST  | 7566 | 1981-12-03 | 3000.00  | NULL    | 20     |
| 7934 | MILLER | MANAGER  | 7777 | 1982-01-23 | 1495.00  | NULL    | 10     |
| 7062 | REVATI | OPERATIONS | 8000 | 1999-12-09 | 2500.00  | 200.00  | 40     |
| 8109 | RAJAN | OPERATIONS | 8452 | 1999-03-10 | 1500.00  | 200.00  | 40     |
| 1111 | Sahil | MANAGER  | 7839 | 2023-04-16 | 10127.00 | 100.00  | 30     |
| 1112 | ABC   | MANAGER  | 7839 | 2023-04-16 | 5555.00  | 100.00  | 30     |
| 1113 | XYZ   | MANAGER  | 7839 | 2023-04-16 | 6666.00  | 100.00  | 30     |
| 100  | Deepak | Accounting | 1234 | 2023-03-16 | 10000.00 | 50.00   | 10     |
| 101  | kelvin | sales    | 1235 | 2023-03-16 | 10000.00 | 50.00   | 10     |
| 102  | Ben   | operations | 4321 | 2023-03-16 | 10000.00 | 50.00   | 10     |
+-----+-----+-----+-----+-----+-----+-----+-----+
22 rows in set (0.00 sec)

```



```
mysql> insert into emp values (103, 'Bill', 'Accounting','1234','2023-03-16',10000,50,70);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into emp values (104, 'Tom', 'sales','1236','2023-03-16',10000,50,50);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into emp values (105, 'Jerry', 'operations','4321','2023-03-16',10000,50,60);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select*from emp;
```

EMPNO	ENAME	job	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902	1980-12-17	800.00	NULL	20
7499	ALLEN	SALESMAN	7698	1981-02-20	1840.00	300.00	30
7521	WARD	SALESMAN	7698	1981-02-22	1437.50	500.00	30
7566	JONES	MANAGER	7839	1981-04-02	2975.00	NULL	20
7654	MARTIN	SALESMAN	7698	1981-09-28	1437.50	1400.00	30
7698	BLAKE	MANAGER	7839	1981-05-01	2850.00	NULL	30
7782	CLARK	MANAGER	7777	1981-06-09	2817.50	NULL	10
7788	SCOTT	ANALYST	7566	1982-12-09	3000.00	NULL	20
7839	KING	MANAGER	7777	1981-11-17	5750.00	NULL	10
7844	TURNER	SALESMAN	7698	1981-09-08	1500.00	0.00	30
7876	ADAMS	CLERK	7788	1983-01-12	1100.00	NULL	20
7900	JAMES	CLERK	7698	1981-12-03	950.00	NULL	30
7902	FORD	ANALYST	7566	1981-12-03	3000.00	NULL	20
7934	MILLER	MANAGER	7777	1982-01-23	1495.00	NULL	10
7062	REVATI	OPERATIONS	8000	1999-12-09	2500.00	200.00	40
8109	RAJAN	OPERATIONS	8452	1999-03-10	1500.00	200.00	40
1111	Sahil	MANAGER	7839	2023-04-16	10127.00	100.00	30
1112	ABC	MANAGER	7839	2023-04-16	5555.00	100.00	30
1113	XYZ	MANAGER	7839	2023-04-16	6666.00	100.00	30
100	Deepak	Accounting	1234	2023-03-16	10000.00	50.00	10
101	kelvin	sales	1235	2023-03-16	10000.00	50.00	10
102	Ben	operations	4321	2023-03-16	10000.00	50.00	10
103	Bill	Accounting	1234	2023-03-16	10000.00	50.00	70
104	Tom	sales	1236	2023-03-16	10000.00	50.00	50
105	Jerry	operations	4321	2023-03-16	10000.00	50.00	60

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

```
mysql> savepoint B;
```

```
Query OK, 0 rows affected (0.00 sec)
```

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

mysql> delete from emp where empno = 100;
Query OK, 1 row affected (0.00 sec)

mysql> delete from emp where empno = 104;
Query OK, 2 rows affected (0.00 sec)

mysql> rollback B;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that co
mysql> rollback savepoint B;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that co
at line 1
mysql> rollback to savepoint B;
Query OK, 0 rows affected (0.05 sec)

mysql> select * from emp;
```

EMPNO	ENAME	job	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902	1980-12-17	1000.00	NULL	20
7499	ALLEN	SALESMAN	7698	1981-02-20	1625.00	300.00	30
7521	WARD	SALESMAN	7698	1981-02-22	1625.00	500.00	30
7566	JONES	MANAGER	7839	1981-04-02	3718.75	NULL	20
7654	MARTIN	SALESMAN	7698	1981-09-28	1625.00	1400.00	30
7698	BLAKE	MANAGER	7839	1981-05-01	1625.00	NULL	30
7782	CLARK	MANAGER	7839	1981-06-09	3062.50	NULL	10
7788	SCOTT	ANALYST	7566	1982-12-09	3750.00	NULL	20
7839	KING	PRESIDENT	NULL	1981-11-17	6250.00	NULL	10
7844	TURNER	SALESMAN	7698	1981-09-08	1625.00	0.00	30
7876	ADAMS	CLERK	7788	1983-01-12	1375.00	NULL	20
7900	JAMES	CLERK	7698	1981-12-03	1625.00	NULL	30
7902	FORD	ANALYST	7566	1981-12-03	3750.00	NULL	20
7934	MILLER	CLERK	7782	1982-01-23	1625.00	NULL	10
100	Deepak	Accounting	1234	2023-03-16	10000.00	50.00	10
101	Kelvin	sales	1235	2023-03-16	10000.00	50.00	10
102	Ben	Operations	1235	2023-03-16	10000.00	50.00	10
103	Bill	Accounting	1234	2023-03-16	10000.00	50.00	10
104	Tom	Sales	1236	2023-03-16	10000.00	50.00	30
104	Jerry	Operations	4321	2023-03-16	10000.00	50.00	40

```
mysql> rollback to savepoint A;
Query OK, 0 rows affected (0.06 sec)

mysql> select * from emp;
```

EMPNO	ENAME	job	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902	1980-12-17	1000.00	NULL	20
7499	ALLEN	SALESMAN	7698	1981-02-20	1625.00	300.00	30
7521	WARD	SALESMAN	7698	1981-02-22	1625.00	500.00	30
7566	JONES	MANAGER	7839	1981-04-02	3718.75	NULL	20
7654	MARTIN	SALESMAN	7698	1981-09-28	1625.00	1400.00	30
7698	BLAKE	MANAGER	7839	1981-05-01	1625.00	NULL	30
7782	CLARK	MANAGER	7839	1981-06-09	3062.50	NULL	10
7788	SCOTT	ANALYST	7566	1982-12-09	3750.00	NULL	20
7839	KING	PRESIDENT	NULL	1981-11-17	6250.00	NULL	10
7844	TURNER	SALESMAN	7698	1981-09-08	1625.00	0.00	30
7876	ADAMS	CLERK	7788	1983-01-12	1375.00	NULL	20
7900	JAMES	CLERK	7698	1981-12-03	1625.00	NULL	30
7902	FORD	ANALYST	7566	1981-12-03	3750.00	NULL	20
7934	MILLER	CLERK	7782	1982-01-23	1625.00	NULL	10
100	Deepak	Accounting	1234	2023-03-16	10000.00	50.00	10
101	Kelvin	sales	1235	2023-03-16	10000.00	50.00	10
102	Ben	Operations	1235	2023-03-16	10000.00	50.00	10

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

```
mysql> rollback to savepoint A;  
ERROR 1305 (42000): SAVEPOINT A does not exist  
mysql>
```

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

```
mysql> delimiter //  
mysql> create procedure getMin(dno int)  
-> begin  
->   select deptno, min(sal)  
->   from emp e  
->   where e.deptno = dno  
->   group by deptno;  
-> end//  
Query OK, 0 rows affected (0.09 sec)  
  
mysql> delimiter ;  
mysql> call getMin(20);  
+-----+-----+  
| deptno | min(sal) |  
+-----+-----+  
|      20 |  1000.00 |  
+-----+-----+  
1 row in set (0.04 sec)  
  
Query OK, 0 rows affected (0.04 sec)  
  
mysql> call getMin(10);  
+-----+-----+  
| deptno | min(sal) |  
+-----+-----+  
|      10 |  1625.00 |  
+-----+-----+  
1 row in set (0.06 sec)  
  
Query OK, 0 rows affected (0.07 sec)
```