**: THURSDAY LAB-15/09/2022 :**

**1. Create table EMPLOYEE with the following details.**

=> create table EMPLOYEE(EMPLOYEE\_ID int(6) not null,LAST\_NAME varchar(25) not null,JOB\_ID varchar(10) not null,SALARY float(8,2) not null,COMM\_PCT float(4,2) not null,MGR\_ID int(6) not null,DEPERTMENT\_ID int(4) not null);

Query OK, 0 rows affected, 5 warnings (0.14 sec)

mysql> desc employee;

+------------------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+------------------+-------------+------+-----+---------+-------+

| EMPLOYEE\_ID | int | NO | | NULL | |

| LAST\_NAME | varchar(25) | NO | | NULL | |

| JOB\_ID | varchar(10) | NO | | NULL | |

| SALARY | float(8,2) | NO | | NULL | |

| COMM\_PCT | float(4,2) | NO | | NULL | |

| MGR\_ID | int | NO | | NULL | |

| DEPERTMENT\_ID | int | NO | | NULL | |

| INCREASED\_SALARY | int | YES | | NULL | |

+------------------+-------------+------+-----+---------+-------+

**2. Insert the following data into EMPLOYEE table.**

=> insert into EMPLOYEE values(198,'Connell','SH\_CLERK',2600,2.5,124,50),

(199,'Grant','SH\_CLERK',2600,2.2,124,50),(200,'Whalen','AD\_ASST',4400,1.3,101,10),

(201,'Hartstein','IT\_PROG',6000,00,100,20),(202,'Fay','AC\_MGR',6500,00,210,20),

(203,'Mavris','AD\_VP',7500,00,101,40),(204,'Baer','AD\_PRES',3500,1.5,101,90),

(205,'Higgins','AC\_MGR',2300,00,101,60),(206,'Gitz','IT\_PROG',5000,00,103,60),

(100,'King','AD\_ASST',8956,0.3,108,100),(101,'Kochar','SH\_CLERK',3400,1.3,118,30);

Query OK, 11 rows affected (0.00 sec)

Records: 11 Duplicates: 0 Warnings: 0

mysql> select \* from EMPLOYEE;

+-------------+-----------+----------+---------+----------+--------+---------------+

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPERTMENT\_ID |

+-------------+-----------+----------+---------+----------+--------+---------------+

| 198 | Connell | SH\_CLERK | 2600.00 | 2.50 | 124 | 50 |

| 199 | Grant | SH\_CLERK | 2600.00 | 2.20 | 124 | 50 |

| 200 | Whalen | AD\_ASST | 4400.00 | 1.30 | 101 | 10 |

| 201 | Hartstein | IT\_PROG | 6000.00 | 0.00 | 100 | 20 |

| 202 | Fay | AC\_MGR | 6500.00 | 0.00 | 210 | 20 |

| 203 | Mavris | AD\_VP | 7500.00 | 0.00 | 101 | 40 |

| 204 | Baer | AD\_PRES | 3500.00 | 1.50 | 101 | 90 |

| 205 | Higgins | AC\_MGR | 2300.00 | 0.00 | 101 | 60 |

| 206 | Gitz | IT\_PROG | 5000.00 | 0.00 | 103 | 60 |

| 100 | King | AD\_ASST | 8956.00 | 0.30 | 108 | 100 |

| 101 | Kochar | SH\_CLERK | 3400.00 | 1.30 | 118 | 30 |

+-------------+-----------+----------+---------+----------+--------+---------------+

11 rows in set (0.00 sec)

**3. Display last\_name, job\_id, employee\_id for each employee with employee\_id appearing first.**

=> select EMPLOYEE\_ID,LAST\_NAME,JOB\_ID from EMPLOYEE order by EMPLOYEE\_ID;

+-------------+-----------+----------+

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID |

+-------------+-----------+----------+

| 100 | King | GRADE\_A |

| 101 | Kochar | SH\_CLERK |

| 198 | Connell | SH\_CLERK |

| 199 | Grant | SH\_CLERK |

| 200 | Whalen | AD\_ASST |

| 201 | Hartstein | GRADE\_A |

| 202 | Fay | GRADE\_A |

| 203 | Mavris | GRADE\_A |

| 204 | Baer | AD\_PRES |

| 205 | Higgins | AC\_MGR |

| 206 | Gitz | IT\_PROG |

+-------------+-----------+----------+

11 rows in set (0.00 sec)

**4. Display the details of all employees of department 60.**

=> select \* from EMPLOYEE where DEPERTMENT\_ID=60;

+-------------+-----------+---------+---------+----------+--------+---------------+

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPERTMENT\_ID |

+-------------+-----------+---------+---------+----------+--------+---------------+

| 205 | Higgins | AC\_MGR | 2300.00 | 0.00 | 101 | 60 |

| 206 | Gitz | IT\_PROG | 5000.00 | 0.00 | 103 | 60 |

+-------------+-----------+---------+---------+----------+--------+---------------+

2 rows in set (0.00 sec)

**5. Display the employee details of the employee who’s last\_name is King.**

=> select \* from EMPLOYEE where LAST\_NAME='King';

+-------------+-----------+---------+---------+----------+--------+---------------+

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPERTMENT\_ID |

+-------------+-----------+---------+---------+----------+--------+---------------+

| 100 | King | AD\_ASST | 8956.00 | 0.30 | 108 | 100 |

+-------------+-----------+---------+---------+----------+--------+---------------+

1 row in set (0.00 sec)

**6. Display unique job\_id from EMPLOYEE table. Give alias name to the column as JOB\_TITLE.**

=> select JOB\_ID as 'JOB\_TITLE' from EMPLOYEE where EMPLOYEE\_ID=203 or EMPLOYEE\_ID=204;

+-----------+

| JOB\_TITLE |

+-----------+

| GRADE\_A |

| AD\_PRES |

+-----------+

2 rows in set (0.00 sec)

**7. Display last\_name, salary and salary increase of Rs300. Give the new column name as ‘Increased Salary’.**

=> alter table EMPLOYEE add INCREASED\_SALARY int(5);

Query OK, 0 rows affected, 1 warning (0.02 sec)

Records: 0 Duplicates: 0 Warnings: 1

update EMPLOYEE set INCREASED\_SALARY=(SALARY+300);

Query OK, 11 rows affected (0.00 sec)

Rows matched: 11 Changed: 11 Warnings: 0

select LAST\_NAME,SALARY,INCREASED\_SALARY from EMPLOYEE;

+-----------+---------+------------------+

| LAST\_NAME | SALARY | INCREASED\_SALARY |

+-----------+---------+------------------+

| Connell | 2600.00 | 2900 |

| Grant | 2600.00 | 2900 |

| Whalen | 4400.00 | 4700 |

| Hartstein | 6000.00 | 6300 |

| Fay | 6500.00 | 6800 |

| Mavris | 7500.00 | 7800 |

| Baer | 3500.00 | 3800 |

| Higgins | 2300.00 | 2600 |

| Gitz | 5000.00 | 5300 |

| King | 8956.00 | 9256 |

| Kochar | 3400.00 | 3700 |

+-----------+---------+------------------+

11 rows in set (0.00 sec)

**8. Display last\_name, salary and annual compensation of all employees, plus a onetime bonus of Rs 100. Give an alias name to the column displaying annual compensation.**

=> mysql> select last\_name,salary,salary\*12+100 as 'annual\_compensation' from employee;

+-----------+---------+---------------------+

| last\_name | salary | annual\_compensation |

+-----------+---------+---------------------+

| Connell | 2600.00 | 31300.00 |

| Grant | 2600.00 | 31300.00 |

| Whalen | 4400.00 | 52900.00 |

| Hartstein | 6000.00 | 72100.00 |

| Fay | 6500.00 | 78100.00 |

| Mavris | 7500.00 | 90100.00 |

| Baer | 3500.00 | 42100.00 |

| Higgins | 2300.00 | 27700.00 |

| Gitz | 5000.00 | 60100.00 |

| King | 8956.00 | 107572.00 |

| Kochar | 3400.00 | 40900.00 |

+-----------+---------+---------------------+

11 rows in set (0.00 sec)

**9. Display the details of those employees who get commission.**

=> select \* from EMPLOYEE where COMM\_PCT>0;

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPERTMENT\_ID | INCREASED\_SALARY |

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

| 198 | Connell | SH\_CLERK | 2600.00 | 2.50 | 124 | 50 | 2900 |

| 199 | Grant | SH\_CLERK | 2600.00 | 2.20 | 124 | 50 | 2900 |

| 200 | Whalen | AD\_ASST | 4400.00 | 1.30 | 101 | 10 | 4700 |

| 204 | Baer | AD\_PRES | 3500.00 | 1.50 | 101 | 90 | 3800 |

| 100 | King | GRADE\_A | 8956.00 | 0.30 | 108 | 100 | 9256 |

| 101 | Kochar | SH\_CLERK | 3400.00 | 1.30 | 118 | 30 | 3700 |

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

6 rows in set (0.00 sec)

**10.Display the details of those employees who do not get commission.**

=> select \* from EMPLOYEE where COMM\_PCT=0;

+-------------+-----------+---------+---------+----------+--------+---------------+------------------+

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPERTMENT\_ID | INCREASED\_SALARY |

+-------------+-----------+---------+---------+----------+--------+---------------+------------------+

| 201 | Hartstein | GRADE\_A | 6000.00 | 0.00 | 100 | 20 | 6300 |

| 202 | Fay | GRADE\_A | 6500.00 | 0.00 | 210 | 20 | 6800 |

| 203 | Mavris | GRADE\_A | 7500.00 | 0.00 | 101 | 40 | 7800 |

| 205 | Higgins | AC\_MGR | 2300.00 | 0.00 | 101 | 60 | 2600 |

| 206 | Gitz | IT\_PROG | 5000.00 | 0.00 | 103 | 60 | 5300 |

+-------------+-----------+---------+---------+----------+--------+---------------+------------------+

5 rows in set (0.00 sec)

**11.Display the Employee\_id, Department\_id and Salary all employees whose salary is greater than 5000.**

=> select EMPLOYEE\_ID,DEPERTMENT\_ID,SALARY from EMPLOYEE where SALARY>5000;

+-------------+---------------+---------+

| EMPLOYEE\_ID | DEPERTMENT\_ID | SALARY |

+-------------+---------------+---------+

| 201 | 20 | 6000.00 |

| 202 | 20 | 6500.00 |

| 203 | 40 | 7500.00 |

| 100 | 100 | 8956.00 |

+-------------+---------------+---------+

4 rows in set (0.00 sec)

**12.Display the Last\_Name and Salary of all employees whose salary is between 4000 and 7000.**

=> select LAST\_NAME,SALARY from EMPLOYEE where SALARY>4000 and SALARY<7000;

+-----------+---------+

| LAST\_NAME | SALARY |

+-----------+---------+

| Whalen | 4400.00 |

| Hartstein | 6000.00 |

| Fay | 6500.00 |

| Gitz | 5000.00 |

+-----------+---------+

4 rows in set (0.00 sec)

**13.Display the details of all employees whose salary is either 6000 or 6500 or 7000.**

=> select \* from EMPLOYEE where SALARY=6000 or SALARY=6500 or SALARY=7000;

+-------------+-----------+---------+---------+----------+--------+---------------+------------------+

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPERTMENT\_ID | INCREASED\_SALARY |

+-------------+-----------+---------+---------+----------+--------+---------------+------------------+

| 201 | Hartstein | GRADE\_A | 6000.00 | 0.00 | 100 | 20 | 6300 |

| 202 | Fay | GRADE\_A | 6500.00 | 0.00 | 210 | 20 | 6800 |

+-------------+-----------+---------+---------+----------+--------+---------------+------------------+

2 rows in set (0.00 sec)

**14.Display the details of all those employees who work either in department 10 or 20 or 30 or 50.**

=> select \* from EMPLOYEE where DEPERTMENT\_ID=10 or DEPERTMENT\_ID=20 or DEPERTMENT\_ID=30 or DEPERTMENT\_ID=50;

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPERTMENT\_ID | INCREASED\_SALARY |

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

| 198 | Connell | SH\_CLERK | 2600.00 | 2.50 | 124 | 50 | 2900 |

| 199 | Grant | SH\_CLERK | 2600.00 | 2.20 | 124 | 50 | 2900 |

| 200 | Whalen | AD\_ASST | 4400.00 | 1.30 | 101 | 10 | 4700 |

| 201 | Hartstein | IT\_PROG | 6000.00 | 0.00 | 100 | 20 | 6300 |

| 202 | Fay | AC\_MGR | 6500.00 | 0.00 | 210 | 20 | 6800 |

| 101 | Kochar | SH\_CLERK | 3400.00 | 1.30 | 118 | 30 | 3700 |

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

6 rows in set (0.00 sec)

**15.Display the details of all employees whose salary is not equal to 5000.**

=> select \* from EMPLOYEE where SALARY!=5000;

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPERTMENT\_ID | INCREASED\_SALARY |

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

| 198 | Connell | SH\_CLERK | 2600.00 | 2.50 | 124 | 50 | 2900 |

| 199 | Grant | SH\_CLERK | 2600.00 | 2.20 | 124 | 50 | 2900 |

| 200 | Whalen | AD\_ASST | 4400.00 | 1.30 | 101 | 10 | 4700 |

| 201 | Hartstein | GRADE\_A | 6000.00 | 0.00 | 100 | 20 | 6300 |

| 202 | Fay | GRADE\_A | 6500.00 | 0.00 | 210 | 20 | 6800 |

| 203 | Mavris | GRADE\_A | 7500.00 | 0.00 | 101 | 40 | 7800 |

| 204 | Baer | AD\_PRES | 3500.00 | 1.50 | 101 | 90 | 3800 |

| 205 | Higgins | AC\_MGR | 2300.00 | 0.00 | 101 | 60 | 2600 |

| 100 | King | GRADE\_A | 8956.00 | 0.30 | 108 | 100 | 9256 |

| 101 | Kochar | SH\_CLERK | 3400.00 | 1.30 | 118 | 30 | 3700 |

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

10 rows in set (0.00 sec)

**16.Display the details of all the CLERKS working in the organization.**

=> select \* from EMPLOYEE where JOB\_ID='SH\_CLERK';

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPERTMENT\_ID | INCREASED\_SALARY |

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

| 198 | Connell | SH\_CLERK | 2600.00 | 2.50 | 124 | 50 | 2900 |

| 199 | Grant | SH\_CLERK | 2600.00 | 2.20 | 124 | 50 | 2900 |

| 101 | Kochar | SH\_CLERK | 3400.00 | 1.30 | 118 | 30 | 3700 |

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

3 rows in set (0.00 sec)

**17.Update the job\_id’s of the employees who earn more than 5000 to Grade\_A.Display the table EMPLOYEE after updating.**

=> update EMPLOYEE set JOB\_ID='GRADE\_A' where SALARY>5000;

Query OK, 4 rows affected (0.00 sec)

Rows matched: 4 Changed: 4 Warnings: 0

mysql> select \* from EMPLOYEE;

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPERTMENT\_ID | INCREASED\_SALARY |

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

| 198 | Connell | SH\_CLERK | 2600.00 | 2.50 | 124 | 50 | 2900 |

| 199 | Grant | SH\_CLERK | 2600.00 | 2.20 | 124 | 50 | 2900 |

| 200 | Whalen | AD\_ASST | 4400.00 | 1.30 | 101 | 10 | 4700 |

| 201 | Hartstein | GRADE\_A | 6000.00 | 0.00 | 100 | 20 | 6300 |

| 202 | Fay | GRADE\_A | 6500.00 | 0.00 | 210 | 20 | 6800 |

| 203 | Mavris | GRADE\_A | 7500.00 | 0.00 | 101 | 40 | 7800 |

| 204 | Baer | AD\_PRES | 3500.00 | 1.50 | 101 | 90 | 3800 |

| 205 | Higgins | AC\_MGR | 2300.00 | 0.00 | 101 | 60 | 2600 |

| 206 | Gitz | IT\_PROG | 5000.00 | 0.00 | 103 | 60 | 5300 |

| 100 | King | GRADE\_A | 8956.00 | 0.30 | 108 | 100 | 9256 |

| 101 | Kochar | SH\_CLERK | 3400.00 | 1.30 | 118 | 30 | 3700 |

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

11 rows in set (0.00 sec)

**18.Display the details of all those employees who are either CLERK or PROGRAMMER or ASSISTANT.**

=> select \* from EMPLOYEE where JOB\_ID='SH\_CLERK' or JOB\_ID='IT\_PROG' or JOB\_ID='AD\_ASST';

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPERTMENT\_ID | INCREASED\_SALARY |

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

| 198 | Connell | SH\_CLERK | 2600.00 | 2.50 | 124 | 50 | 2900 |

| 199 | Grant | SH\_CLERK | 2600.00 | 2.20 | 124 | 50 | 2900 |

| 200 | Whalen | AD\_ASST | 4400.00 | 1.30 | 101 | 10 | 4700 |

| 206 | Gitz | IT\_PROG | 5000.00 | 0.00 | 103 | 60 | 5300 |

| 101 | Kochar | SH\_CLERK | 3400.00 | 1.30 | 118 | 30 | 3700 |

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

5 rows in set (0.00 sec)

**19.Display those employees from the EMPLOYEE table whose designation is CLERK and salary is less than 3000.**

=> select \* from EMPLOYEE where JOB\_ID='SH\_CLERK' and SALARY<3000;

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPERTMENT\_ID | INCREASED\_SALARY |

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

| 198 | Connell | SH\_CLERK | 2600.00 | 2.50 | 124 | 50 | 2900 |

| 199 | Grant | SH\_CLERK | 2600.00 | 2.20 | 124 | 50 | 2900 |

+-------------+-----------+----------+---------+----------+--------+---------------+------------------+

2 rows in set (0.00 sec)

**20.Display those employees Last\_Name, Mgr\_id from the EMPLOYEE table whose salary is above 3000 and work under Manager 101.**

=> select LAST\_NAME,MGR\_ID from EMPLOYEE where SALARY>3000 and MGR\_ID=101;

+-----------+--------+

| LAST\_NAME | MGR\_ID |

+-----------+--------+

| Whalen | 101 |

| Mavris | 101 |

| Baer | 101 |

+-----------+--------+

3 rows in set (0.00 sec)