1.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),

MGR\_ID int(6) not null, DEPARTMENT\_ID int(4) not null);

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) | YES | | NULL | |

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

| DEPARTMENT\_ID | int | NO | | NULL | |

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

2.insert into employee(employee\_id, last\_name, job\_id, salary, comm\_pct, mgr\_id, department\_id) 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, null, 100, 20

), (202, 'Fay', 'AC\_MGR', 6500, null, 210, 20), (203, 'Mavris', 'AD\_VP', 7500, null, 101, 40), (204, 'Baer', 'AD\_PRES', 3500, 1.5, 101, 90), (205, 'Higgins'

, 'AC\_MGR', 2300, null, 101, 60), (206, 'Gitz', 'IT\_PROG', 5000, null, 103, 60), (100, 'King', 'AD\_ASST', 8956, 0.3, 108, 100), (101, 'Kochar', 'SH\_CLERK',

3400, 1.3, 118, 30);

select \* from employee;

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

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPARTMENT\_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 | NULL | 100 | 20 |

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

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

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

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

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

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

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

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

3. select employee\_id, last\_name, job\_id from employee order by employee\_id;

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

| employee\_id | last\_name | job\_id |

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

| 100 | King | AD\_ASST |

| 101 | Kochar | SH\_CLERK |

| 198 | Connell | SH\_CLERK |

| 199 | Grant | SH\_CLERK |

| 200 | Whalen | AD\_ASST |

| 201 | Hartstein | IT\_PROG |

| 202 | Fay | AC\_MGR |

| 203 | Mavris | AD\_VP |

| 204 | Baer | AD\_PRES |

| 205 | Higgins | AC\_MGR |

| 206 | Gitz | IT\_PROG |

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

4.select \* from employee where department\_id like '6%';

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

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

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

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

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

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

5. select \* from employee where last\_name like 'k%g';

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

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

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

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

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

6. select job\_id as 'JOB\_TITLE' from employee;

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

| JOB\_TITLE |

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

| SH\_CLERK |

| SH\_CLERK |

| AD\_ASST |

| IT\_PROG |

| AC\_MGR |

| AD\_VP |

| AD\_PRES |

| AC\_MGR |

| IT\_PROG |

| AD\_ASST |

| SH\_CLERK |

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

7.alter table employee add Increased\_salary int(10);

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

update employee set increased\_salary=300;

Query OK, 11 rows affected (0.01 sec)

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

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPARTMENT\_ID | Increased\_salary |

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

| 198 | Connell | SH\_CLERK | 2600.00 | 2.50 | 124 | 50 | 300 |

| 199 | Grant | SH\_CLERK | 2600.00 | 2.20 | 124 | 50 | 300 |

| 200 | Whalen | AD\_ASST | 4400.00 | 1.30 | 101 | 10 | 300 |

| 201 | Hartstein | IT\_PROG | 6000.00 | NULL | 100 | 20 | 300 |

| 202 | Fay | AC\_MGR | 6500.00 | NULL | 210 | 20 | 300 |

| 203 | Mavris | AD\_VP | 7500.00 | NULL | 101 | 40 | 300 |

| 204 | Baer | AD\_PRES | 3500.00 | 1.50 | 101 | 90 | 300 |

| 205 | Higgins | AC\_MGR | 2300.00 | NULL | 101 | 60 | 300 |

| 206 | Gitz | IT\_PROG | 5000.00 | NULL | 103 | 60 | 300 |

| 100 | King | AD\_ASST | 8956.00 | 0.30 | 108 | 100 | 300 |

| 101 | Kochar | SH\_CLERK | 3400.00 | 1.30 | 118 | 30 | 300 |

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

8.

9.select \* from employee where comm\_pct is not null;

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

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPARTMENT\_ID | Increased\_salary |

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

| 198 | Connell | SH\_CLERK | 2600.00 | 2.50 | 124 | 50 | 300 |

| 199 | Grant | SH\_CLERK | 2600.00 | 2.20 | 124 | 50 | 300 |

| 200 | Whalen | AD\_ASST | 4400.00 | 1.30 | 101 | 10 | 300 |

| 204 | Baer | AD\_PRES | 3500.00 | 1.50 | 101 | 90 | 300 |

| 100 | King | AD\_ASST | 8956.00 | 0.30 | 108 | 100 | 300 |

| 101 | Kochar | SH\_CLERK | 3400.00 | 1.30 | 118 | 30 | 300 |

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

10. select \* from employee where comm\_pct is null;

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

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPARTMENT\_ID | Increased\_salary |

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

| 201 | Hartstein | IT\_PROG | 6000.00 | NULL | 100 | 20 | 300 |

| 202 | Fay | AC\_MGR | 6500.00 | NULL | 210 | 20 | 300 |

| 203 | Mavris | AD\_VP | 7500.00 | NULL | 101 | 40 | 300 |

| 205 | Higgins | AC\_MGR | 2300.00 | NULL | 101 | 60 | 300 |

| 206 | Gitz | IT\_PROG | 5000.00 | NULL | 103 | 60 | 300 |

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

11. select employee\_id, department\_id, salary from employee where salary>5000;

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

| employee\_id | department\_id | salary |

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

| 201 | 20 | 6000.00 |

| 202 | 20 | 6500.00 |

| 203 | 40 | 7500.00 |

| 100 | 100 | 8956.00 |

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

12.select employee\_id, department\_id, salary from employee where salary<7000 and salary>4000;

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

| employee\_id | department\_id | salary |

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

| 200 | 10 | 4400.00 |

| 201 | 20 | 6000.00 |

| 202 | 20 | 6500.00 |

| 206 | 60 | 5000.00 |

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

13. select employee\_id, department\_id, salary from employee where salary=6000 or salary=6500 or salary=7000;

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

| employee\_id | department\_id | salary |

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

| 201 | 20 | 6000.00 |

| 202 | 20 | 6500.00 |

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

14. select \* from employee where department\_id=10 or department\_id=20 or department\_id=30 or department\_id=50;

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

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPARTMENT\_ID | Increased\_salary |

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

| 198 | Connell | SH\_CLERK | 2600.00 | 2.50 | 124 | 50 | 300 |

| 199 | Grant | SH\_CLERK | 2600.00 | 2.20 | 124 | 50 | 300 |

| 200 | Whalen | AD\_ASST | 4400.00 | 1.30 | 101 | 10 | 300 |

| 201 | Hartstein | IT\_PROG | 6000.00 | NULL | 100 | 20 | 300 |

| 202 | Fay | AC\_MGR | 6500.00 | NULL | 210 | 20 | 300 |

| 101 | Kochar | SH\_CLERK | 3400.00 | 1.30 | 118 | 30 | 300 |

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

15.select employee\_id, department\_id, salary from employee where salary!=5000;

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

| employee\_id | department\_id | salary |

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

| 198 | 50 | 2600.00 |

| 199 | 50 | 2600.00 |

| 200 | 10 | 4400.00 |

| 201 | 20 | 6000.00 |

| 202 | 20 | 6500.00 |

| 203 | 40 | 7500.00 |

| 204 | 90 | 3500.00 |

| 205 | 60 | 2300.00 |

| 100 | 100 | 8956.00 |

| 101 | 30 | 3400.00 |

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

16. select \* from employee where job\_id='sh\_clerk';

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

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPARTMENT\_ID | Increased\_salary |

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

| 198 | Connell | SH\_CLERK | 2600.00 | 2.50 | 124 | 50 | 300 |

| 199 | Grant | SH\_CLERK | 2600.00 | 2.20 | 124 | 50 | 300 |

| 101 | Kochar | SH\_CLERK | 3400.00 | 1.30 | 118 | 30 | 300 |

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

17.

18. select \* from employee where job\_id='sh\_clerk' or job\_id='ad\_asst' or job\_id='it\_prog';

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

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPARTMENT\_ID | Increased\_salary |

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

| 198 | Connell | SH\_CLERK | 2600.00 | 2.50 | 124 | 50 | 300 |

| 199 | Grant | SH\_CLERK | 2600.00 | 2.20 | 124 | 50 | 300 |

| 200 | Whalen | AD\_ASST | 4400.00 | 1.30 | 101 | 10 | 300 |

| 201 | Hartstein | IT\_PROG | 6000.00 | NULL | 100 | 20 | 300 |

| 206 | Gitz | IT\_PROG | 5000.00 | NULL | 103 | 60 | 300 |

| 100 | King | AD\_ASST | 8956.00 | 0.30 | 108 | 100 | 300 |

| 101 | Kochar | SH\_CLERK | 3400.00 | 1.30 | 118 | 30 | 300 |

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

19.select \* from employee where job\_id='sh\_clerk' and salary<3000;

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

| EMPLOYEE\_ID | LAST\_NAME | JOB\_ID | SALARY | COMM\_PCT | MGR\_ID | DEPARTMENT\_ID | Increased\_salary |

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

| 198 | Connell | SH\_CLERK | 2600.00 | 2.50 | 124 | 50 | 300 |

| 199 | Grant | SH\_CLERK | 2600.00 | 2.20 | 124 | 50 | 300 |

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

20.select last\_name, mgr\_id from employee where mgr\_id=101 and salary>3000;

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

| last\_name | mgr\_id |

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

| Whalen | 101 |

| Mavris | 101 |

| Baer | 101 |

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