**Assignment-8**

**Mixed Subquery**

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| --- | --- |
| 1 | Create following tables and solve the  questions |
|  | CREATE TABLE faculty  (  fid int primary key,   fname varchar (20) not null,  sp\_skill1 varchar (30),  sp\_skill2 varchar (30)  );   |  |  |  |  | | --- | --- | --- | --- | | **fid** | **fname** | **sp\_skill1** | **sp\_skill2** | | 10 | Amol | Database | Java | | 11 | Asha | Java | MySQL | | 12 | Kiran | CPP | database | | 13 | Seeta | MySQL | database | |
|  | . courses(cid(PK),cname,rid,fid(FK))     CREATE TABLE Courses(    cid int primary key,    cname varchar (15) not null  ,    rid int,     fid int,    foreign key(rid) references room(rid) on delete set null,    foreign key(fid) references faculty(fid) on delete set null)   |  |  |  |  | | --- | --- | --- | --- | | **cid** | **cname** | **rid** | **fid** | | 121 | DBDA | 100 | 10 | | 131 | DAC | 101 | null | | 141 | DTISS | null | null | | 151 | DOIT | 105 | 12 | |
|  | room(roomid,rname,rloc)     CREATE TABLE room(    rid int primary key,    rname varchar(15) not null,    rloc varchar(20));   |  |  |  | | --- | --- | --- | | rid | rname | rloc | | 100 | Jasmin | 1st floor | | 101 | Rose | 2nd floor | | 105 | Lotus | 1st floor | | 103 | Mogra | 1st floor | |
|  | 1. List all rooms which are not allocated to any courses. Expected Output +---------+-------------+-------------+ |  rid      | rname     | rloc      |    | +---------+-------------+-------------+ |103     | Mogra     | 1st floor | +---------+-------------+--------------+ |
|  | 2. List all faculties conducting module MySQL |
|  | 3. Generate detailed report as follows for all courses  cid,cname,rid,rname,rloc,fid,fname |
|  | 4. list all rooms which are allocated or not allocated to any courses.  Expected Output +---------+-------------+----------+------------+ |  rid      | rname     | cid       | cname   | +---------+-------------+----------+------------+ | 100     | Jasmin    |  121     | DBDA     | | 101     | Rose        |  131     | DAC       | | 103     | Mogra     | NULL   | NULL     | | 105     | Lotus       |  151     | DIOT      | +---------+-------------+----------+------------+ 4 rows in set (0.00 sec) |
|  | 5. display courses and faculty assigned to those courses whose special skill is database.  Expected Output +-------+-----------+-------+-----------+--------------+---------------+ | cid    | cname  | fid    | fname  | sp\_skill1   | sp\_skill2    | +-------+-----------+-------+-----------+--------------+---------------+ | 121  | DBDA    |  10   | Amol     | database  |  JAVA         | | 151  | DIOT      |  12   | Kiran     | CPP           |  Database | +-------+-----------+--------+-----------+-------------+---------------+ 2 rows in set (0.00 sec) |

**Use emp, dept**

|  |  |
| --- | --- |
| 1 | Find 4th highest sal in emp table |
| 2 | List all employees earning sal less than the avg sal of the dept they work in. |
| 3 | List ename, deptno and sal of employees earning maximum salary in their dept using correlated query. |
| 4 | List ename, deptno and sal of employees earning maximum salary in their dept using partition by clause |
| 5 | List all employes allocated with correct deptno. Use correlated query. |
| 6 | List the details of dept in which no emp is working. Use correlated query. |
| 7 | Company decides to give rise to all employees depending on their salary grade. Information of which is stored in increment table. Create the table. Stored the data and solve the query. Create  table increment (     grade int,     hike int ); insert following data (1,10),(2,7),(3,5),(4,2),(5,null)  Consider emp,dept,salgrade and increment table . Display empno,ename,deptno,dname,sal,grade  and hike for all employees. |
| 8 | Consider emp and dept  table display empno,ename,deptno, dname and loc for all employees who are working as managers. |
| 9 | Copy table emp as emp10 and dept as dept10  Add following constraints on the emp10 and dept10 tables  Emp table  Empno -pk  Ename -nn  Deptno -fk  Dept table  Deptno-pk  Loc – unique nn  Dname – unique nn |
| 10 | Practice rollback, savepoint, commit |
| 11 | Practice alter caluse |

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