Abhishek Tyagi  
DBMS Practice Set-1  
MCA Sem 1  
All commands for queries:

create table EMPLOYEE

(

empno varchar2(10),

empname varchar2(40),

street varchar2(12),

city varchar2(15)

);

create table DEPARTMENT

(

deptid varchar2(10),

deptname varchar2(15),

city varchar2(15)

);

create table WORKS

(

empno varchar2(10),

deptid varchar2(10),

salary number(8)

);

create table MANAGES

(

empno varchar2(10),

managerid varchar2(10)

);

--alter table EMPLOYEE add empname varchar2(40);

SELECT table\_name FROM user\_tables;

alter table EMPLOYEE add constraint pk\_employee primary key(empno);

alter table DEPARTMENT add constraint pk\_department primary key(deptid);

alter table MANAGES add constraint fk\_manages2 foreign key(managerid) references EMPLOYEE(empno);

alter table WORKS add constraint fk\_works1 foreign key(empno) references EMPLOYEE(empno);

alter table WORKS add constraint fk\_works2 foreign key(deptid) references DEPARTMENT(deptid);

alter table MANAGES add constraint fk\_manages foreign key(empno) references EMPLOYEE(empno);

select constraint\_name, constraint\_type, table\_name from user\_constraints;

insert into EMPLOYEE values('1001','Virender','AB','Delhi');

insert into EMPLOYEE values('1002','Sachin','AA','Delhi');

insert into EMPLOYEE values('1003','Mahendra','AC','Banglore');

insert into EMPLOYEE values('1004','Gautam','BG','Hydrabad');

insert into EMPLOYEE values('1005','Dinesh','LM','Delhi');

insert into EMPLOYEE values('1006','Preeti','AB','Delhi');

insert into EMPLOYEE values('1007','Bhavya','JK','UP');

insert into EMPLOYEE values('1008','Zaheer','AB','Delhi');

insert into EMPLOYEE values('1009','Ankita','JK','UP');

insert into EMPLOYEE values('1010','Yuvraj','JK','UP');

insert into EMPLOYEE values('1011','Jaspreet','FF','Banglore');

insert into EMPLOYEE values('1012','Hardik','ZY','Hydrabad');

insert into EMPLOYEE values('1013','Shrayas','VG','Banglore');

insert into EMPLOYEE values('1014','Sukriti','GH','UP');

insert into EMPLOYEE values('1015','Jasmine','NM','Hydrabad');

select\*from EMPLOYEE;

insert into DEPARTMENT values('10','Finance','Delhi');

insert into DEPARTMENT values('11','Sales','Banglore');

insert into DEPARTMENT values('12','Account','Hydrabad');

insert into DEPARTMENT values('13','Inventory','UP');

select\*from DEPARTMENT;

delete from department;

insert into WORKS values('1001','10',10000);

insert into WORKS values('1002','13',6000);

insert into WORKS values('1003','13',10000);

insert into WORKS values('1004','12',10000);

insert into WORKS values('1005','10',6500);

insert into WORKS values('1006','11',7500);

insert into WORKS values('1007','10',15000);

insert into WORKS values('1008','11',7000);

insert into WORKS values('1009','11',11000);

insert into WORKS values('1010','13',9000);

insert into WORKS values('1011','12',16000);

insert into WORKS values('1012','10',10000);

insert into WORKS values('1013','10',11000);

insert into WORKS values('1014','10',20000);

insert into WORKS values('1015','10',13000);

select\*from WORKS;

insert into MANAGES values('1001','1002');

insert into MANAGES values('1003','1002');

insert into MANAGES values('1004','1006');

insert into MANAGES values('1005','1002');

insert into MANAGES values('1007','1010');

insert into MANAGES values('1008','1002');

insert into MANAGES values('1009','1006');

insert into MANAGES values('1011','1014');

insert into MANAGES values('1012','1010');

insert into MANAGES values('1013','1014');

insert into MANAGES values('1015','1014');

select\*from MANAGES;

select\*from EMPLOYEE;

select\*from DEPARTMENT;

select\*from WORKS;

select\*From MANAGES;

--Query 1

select e.empname from employee e,department d ,works w where w.empno=e.empno and w.deptid=d.deptid and d.deptname='Finance';

--Query 2

select e.empname, e.city from employee e,department d ,works w where w.empno=e.empno and w.deptid=d.deptid and d.deptname='Finance';

--Q3

select e.empname, e.street, e.city from employee e,department d ,works w where w.empno=e.empno and w.deptid=d.deptid and d.deptname='Finance' and w.salary>10000;

--Q4

select e.empname, e.street, e.city from employee e,department d ,works w where w.empno=e.empno and w.deptid=d.deptid and e.city=d.city;

--Q5

select e.empname from employee e, employee e1, manages m

where m.empno = e.empno and m.managerid = e1.empno and e.city = e1.city and e.street = e1.street ;

--Q6

select e.empname, e.city from employee e,department d ,works w where w.empno=e.empno and w.deptid=d.deptid and d.deptname<>'Finance';

--Q7

select empno from works

where salary >

(select max(salary)

from works

where deptid = (select deptid from department where deptname='Sales')) ;

--Q8

select deptname from department where City IN (select City from department where deptname ='Sales');

--Q9

select e.empname ,w.empno from works w, employee e where e.empno=w.empno and salary >(select avg(salary) from works s where w.deptid = s.deptid)

--Q10

select deptname, count(\*) as countt from works w,department d,employee e where w.deptid=d.deptid and w.empno=e.empno group by deptname order by countt desc;

--Q11

select deptid from works group by deptid having sum(salary) <= all (select sum(salary) from works group by deptid);

--Q12

select d.deptid,d.deptname,avgsal.sal from department d,works w,(select deptname,avg(salary) as sal from department d1,works w1

where d1.deptid=w1.deptid and d1.deptname<>'Finance' group by d1.deptname) as avgsal

where w.deptid=d.deptid and d.deptname=avgsal.deptname and

avgsal.sal>(select avg(salary) from department d2,works w2 where d2.deptid=w2.deptid and d2.deptname='Finance');