Q.4 Create the following tables, enter at 5 records in each table and answer the queries given below.
EMPLOYEE (Person_Name, Street, City)
WORKS (Person_Name, Company_Name, Salary) COMPANY (Company_Name, City)
MANAGES (Person_Name, Manager_Name)
a) Identify primary and foreign keys.
b) Alter table employee, add a column “email” of type varchar(20).
c) Find the name of all managers who work for both Samba Bank and NCB Bank. d) Find the names, street address and cities of residence and salary of all employees who work for “Samba Bank” and earn more than $10,000.
e) Find the names of all employees who live in the same city as the company for which they work.
f) Find the highest salary, lowest salary and average salary paid by each company. g) Find the sum of salary and number of employees in each company. h) Find the name of the company that pays highest salary.

ANSWER. 4

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create table Employee(
Person_name varchar(20) primary key,
Street varchar(20),
City varchar(20));

create table Works(
Person_name varchar(20) primary key,
Company_name varchar(20) not null,
Salary int(6),
foreign key(Person_name) references Employee(Person_name));

create table company(
Company_name varchar(20) primary key,
city varchar(20));

create table Manages(
Person_name varchar(20) primary key,
Manager_name varchar(20)
foreign key(Preson_name) references Employee(Person_name));
```

```
alter table works
add constraint foreign key(Company_name) references Company(Company_name);
```

```
insert into employee values("Ankit","23/34 B block","Delhi");
insert into employee values("Sahil","454/4 V block","Gurgaon");
insert into employee values("Rohan","65/6 A block","Noida");
insert into employee values("Sohan","87/2 D block","Palan");
insert into employee values("Ram","74/2 F block","Gaziabad");
insert into employee values("Saurav","54/2 G block","Noida");
insert into employee values("Piyush","347-5 A block","Noida");
insert into employee values("Pulkit","65/8 V block","Rohini");
insert into employee values("Nikhil","62/7 d block","Pitampura");
insert into employee values("Gaurav","91/8 C block","Gaziabad");
```

```
insert into company values("Samba Bank","Delhi");
insert into company values("NCB Bank","Gurgaon");
insert into company values("Canara Bank","Noida");
insert into company values("SBI bank","Palam");
insert into company values("Kotak Bank","Gaziabad");
```

```
insert into works values("Sahil","Samba Bank", 20000);
insert into works values("Ram","NCB Bank",25000);
insert into works values("Ananya","Samba Bank",10000);
insert into works values("Rohan","SBI Bank",8000);
insert into works values("Gaurav","canara Bank",10000);
insert into works values("Saurav","NCB Bank",20000);
insert into works values("Sohan","Kotak Bank",25000);
insert into works values("Pulkit","canara Bank",20000);
insert into works values("Nikhil","SBI Bank",12000);
insert into works values("Neha","Kotak Bank",15000);
```

```
insert into manages values("Ankit","Rohan");
insert into manages values("Sohan","Sahil");
insert into manages values("Gaurav","pulkit");
insert into manages values("Saurav","Shri");
insert into manages values("Piyush","Ramesh");
```

(a)
Primary keys
Employee: Person_name
Works: Person_name
Company: Company_Name
Manages: Person_name

Foreign keys are
Works: Person_name, Company_name
manages: Person_name

(b) alter table employee
add column email varchar(20) not null;

(c) select Manager_name from manages where person_name in(
select person_name from works where company_name="Samba bank" and
company_name="NCB bank");

(d) select em.person_name , street, city, salary from employee as e,works as w
where e.Person_name=w.Person_name and
w.Company_name="Samba Bank" and w
.Salary>10000;

(e)select em.Person_name from employee as e , company as c, works as w where
e.Person_name=w.person_name and w.company_name=c.company_name
and e.city=c.city;

(f) select company_name,max(salary) as Highest_Salary, min(salary) as
Lowest_salary,avg(salary) as Average_salary from works
group by company_name;

(g select company_name,sum(salary), count(person_name) from works
group by company_name;

(h) select company_name,max(salary) from works;