lab-task



COURSE:

Database Systems

Submitted to:

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Topic:

Lab task

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Question #1

```
create database DreamHome;
USE DreamHome:
create table Branch
branchNo varchar(20) NOT NULL PriMark Key,
street varchar(100) NOT NULL,
city varchar(50) NOT NULL,
postcode varchar(20) NOT NULL
);
create table Staff
staffNo varchar(20)0 NOT NULL PRIMARK KEY,
fName varchar(50) NOT NULL,
Name varchar(50) NOT NULL,
position varchar(50) NOT NULL,
sex varchar(1) NOT NULL, DOB DateTime NOT NULL,
salary DECIMAL NOT NULL.
branchNo varchar(20) NOT NULL References Branch(branchNo)
);
create table Client
clientNo varchar(20) NOT NULL PRIMARK KEY,
fName varchar(50) NOT NULL,
Name varchar(50) NOT NULL,
telNo varchar(20) NOT NULL,
prefType varchar(50) NOT NULL,
maxRent DECIMAL NOT NULL
);
create table PrivateOwner
ownerNo varchar(20) NOT NULL PRIMARK KEY,
fName varchar(50) NOT NULL,
Name varchar(50) NOT NULL,
address varchar(50) NOT NULL,
telNo varchar(20) NOT NULL
create table PropertyForRent
propertyNo varchar(20) NOT NULL PRIMARK KEY,
street varchar(100) NOT NULL,
city varchar(50) NOT NULL,
postcode varchar(20) NOT NULL,
type varchar(10) NOT NULL,
rooms int NOT NULL,
rent DECIMAL NOT NULL,
ownerNo varchar(20) References PrivateOwner(ownerNo),
staffNo varchar(20) NOT NULL References Staff(staffNo).
branchNo varchar(20) NOT NULL References Branch(branchNo)
);
create table Viewing
```

```
clientNo varchar(20) NOT NULL References Client(clientNo),
propertyNo varchar(20) NOT NULL References PropertyForRent(propertyNo),
viewDate DateTime NOT NULL,
comment varchar(200) NOT NULL
);
create table Registration
clientNo varchar(20) NOT NULL References Client(clientNo),
branchNo varchar(20) NOT NULL References Branch(branchNo),
staffNo varchar(20) NOT NULL References Staff(staffNo),
dateJoined DateTime NOT NULL
INSERT into Branch
branchNo,
street.
city,
postcode
VALUES
(N'B001',N'H#7 I-10/2', N'LHR', N'52000'),
(N'B002',N'H#78 Supply', N'ABT', N'53000'), (N'B005',N'H#79 I-10/2', N'LHR', N'52000'),
(N'B004',N'H#78 Mandian', N'ABT', N'53000');
insert into Staff
staffNo,
fName.
Name,
position,
sex,
DOB,
salary,
branchNo
VALUES
N'SA9', N'Mark', N'Luther', N'Assistant', N'F', CAST (0x0000641000000000 AS DateTime),
CAST(9000 AS Decimal(18, 0)), N'B002'
),
(N'SG14', N'David', N'Malan', N'Supervisor', N'M'
CAST(0x0000531200000000 AS DateTime), CAST(18000 AS Decimal(18,0)),
(N'SG37', N'Alex', N'Beech', N'Assistant', N'F',
CAST(0x000056D400000000 AS DateTime), CAST(12000 AS Decimal(18,0)),
N'B005'),
(N'SG5', N'Susan', N'Bhatti', N'Manager', N'F',
CAST(0x0000C85800000000 AS DateTime), CAST(24000 AS Decimal(18,0)),
N'B005'),
(N'SL21', N'Robert', NBlack', N'Manager', N'M',
CAST(0x0000CFF200000000 AS DateTime), CAST(30000 AS Decimal(18,0)),
(N'SL41', N'Charlie', N'Japlin', N'Assistant', N'F',
CAST(0x00005D6000000000 AS DateTime), CAST(9000 AS Decimal(18, 0)),
```

```
N'B002');
insert into Client
clientNo,
fName,
Name,
telNo,
prefType,
maxRent
va ues
'B1001', 'Usman', 'Maqsood', '030078601', 'yes', 1000.0
),
'B1002', 'Sanaullah', 'Khan', '030054621', 'yes', 2000.0
),
'B1003', 'Muzammil', 'Shahid', '030456601', 'no', 1500.0
),
'B1004','Ali','Irteza','0306446641','yes',8800.0
),
"B1005", 'Abdul', 'Wahab', '0354654401", 'noo', 800.0
),
'B1006', 'Usama', 'Fareed', '030074541', 'yes', 4000.0
insert into PrivateOwner
ownerNo,
fName,
Name,
[address],
te No
va ues
'B1', 'Group', 'Leader', 'F18-4A', '03105023263'
),
B2','Usman','Maqsood','F17-4A','03105023261'
),
'B3', 'Sanaullah', 'Khan', 'F14-7A', '0352354264'
),
'B4', 'Muhammad', 'Muzammil', 'F88-4A', '03105023265'
),
'B5','Ali','Irteza','F11-3A',''3105023233''
),
'B6','Abdul','Wahab','F19-5A','03105023263'
```

```
insert into PropertyForRent
        propertyNo, street, city, postcode, [type], rooms, rent, ownerNo, staffNo, branchNo
        va ues
         'BF2','H2-h2','ABT','22010','|arge',8,'30000','B2','SG14','B002'
        ),
         'BF3', 'H3-h3', 'LHR', '62010', 'medium', 6, '20000', 'B3', 'SG37', 'B005'
        ),
         "BF4", "H4-h4", "LHR", "62010", "small", 4, "10000", "B4", "SG5", "B004"
        insert into Viewing
        clientNo.
        propertyNo,
        viewDate,
        comment
        va ues
         'B1002', 'BF2', '2020-2-10', 'No, i am not interested''
        ),
         'B1003', 'BF3', '2020-3-10', 'No, i am not interested''
        ),
         'B1004', 'BF4', '2020-4-10', 'No, i am not interested''
        );
        insert into Viewing
        clientNo,
        propertyNo,
        viewDate,
        comment
        va ues
         'B1002', 'BF2', '2020-2-10', 'No, i am not interested''
         'B1003', 'BF3', '2020-3-10', 'No, i am not interested''
        ),
         'B1004', 'BF4', '2020-4-10', 'No, i am not interested''
        );
Comment _
Reviews
Rating
```

Question # 2

select * from Branch update Branch set city='ABT' where city='LHR';

Question #1

select distinct(postcode) from Branch

Question #2

select distinct(fName) from Staff

Question #3

select staffNo as [Cadre No], fName as [Baptism Name], IName as [Sur name],
position as [Locale], sex as [Gender],DOB as [Birtday], salary as Income,
branchNo as [Section No] from Staff

Question #4

select clientNo as [Buyer No], fName as [Baptism Name], IName as [Sur name],
telNo as [Fax Number],prefType as [Proclivity Type],maxRent as [Supreme Cost] fromClient;

Question #5

select * from Staff where salary>10000

Question #6

select * from Staff where position='Manager' or position='Supervisor'

Comment _ Reviews _ Rating _

Question #1

select staffNo,fName, IName, salary from staff order by salary desc

Question #2

select propertyNo,type,rooms,rent from PropertyForRent
order by type
select propertyNo,type,rooms,rent
from PropertyForRent
order by type,rent desc

Question #3

select count(*) as myCount
from PropertyForRent
where rent<=500</pre>

Question #4

select count(Distinct propertyNo) As myCount from Viewing
WHERE viewDate BETWEEN '1-Dec-04' AND '31-Dec-04';

Question #5

 $\begin{tabular}{ll} select count(staffNo) as myCount, sum(salary) as mySalary from staff where \\ position='Manager' \end{tabular}$

Question #6

```
select MIN(salary) as myMin,
MAX(salary) as myMax,
AVG(salary) as myAVG from Staff
```

Question #7

```
SELECT staffNo, fName, IName, position, salary FROM Staff
WHERE (SELECT AVG(salary) FROM Staff) < salary;
```

Question #8

select *from Staff where salary> any(select salary from Staff where branchNo='B005')

Question #9

select *from Staff where salary> all(select salary from Staff where branchNo='B005')

INDIVIDUAL SOLUTIONS

Sanaullah Khan

```
select distinct(postcode) from Branch
select distinct(fName) from Staff
select staffNo as [Cadre No], fName as [Baptism Name], IName as [Sur name],
position as [Locale], sex as [Gender],DOB as [Birtday] ,salary as Income,
branchNo as [Section No] from Staff
select clientNo as [Buyer No], fName as [Baptism Name], IName as [Sur name],
telNo as [Fax Number],prefType as [Proclivity Type],maxRent as [Supreme Cost] from Client;
select * from Staff where salary>10000
select * from Staff where position='Manager' or position='Supervisor'
```

Usman Maqsood

```
select staffNo,fName, IName, salary from staff order by salary desc
select propertyNo,type,rooms,rent from PropertyForRent
order by type
select propertyNo,type,rooms,rent
from PropertyForRent
order by type, rent desc
select count(*) as myCount
from PropertyForRent
where rent<=500
select count(Distinct propertyNo) As myCount from Viewing
WHERE viewDate BETWEEN '1-Dec-04' AND '31-Dec-04';
select count(staffNo) as myCount,sum(salary) as mySalary from staff
where
position="Manager"
select MIN(salary) as myMin,
MAX(salary) as myMax,
AVG(salary) as myAVG from Staff
SELECT staffNo, fName, IName, position, salary
WHERE (SELECT AVG(salary) FROM Staff) < salary;</pre>
select *from Staff where salary> any(select salary from Staff where branchNo='B005')
select *from Staff where salary> all(select salary from Staff where branchNo='B005')
```

```
Comment _
Reviews _
Rating _
```



