

Group-4

| |
|----------------------------------|
| Members:- |
| 1.Mahad Ali Awan (Leader) |
| 2.Hanzala Shahid |
| 3.Usama Fareed |
| 4.Sharjeel Khan Niazi |
| 5.Hamza Aslam |
| 6.Abdullah Noor Niazi |
| 7.Hamza Ahmad |
| 8.Usman Jadoon |

Common Solution:-

By

Mahad Ali Awan

Lab 6

Qno1:-

Answer:-

```
create database DreamHome;
USE DreamHome;
create table Branch
(
branchNo varchar(20) NOT NULL Primary Key,
street varchar(100) NOT NULL,
city varchar(50) NOT NULL,
postcode varchar(20) NOT NULL
);
create table Staff
(
staffNo varchar(20) NOT NULL PRIMARY KEY,
fName varchar(50) NOT NULL,
lName 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 PRIMARY KEY,
fName varchar(50) NOT NULL,
lName 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 PRIMARY KEY,
fName varchar(50) NOT NULL,
lName varchar(50) NOT NULL,
address varchar(50) NOT NULL,
telNo varchar(20) NOT NULL
);
create table PropertyForRent
(
propertyNo varchar(20) NOT NULL PRIMARY 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
('B001', 'H#7 I-10/2', 'ISB', '52000'),
('B002', 'H#78 Supply', 'ABT', '53000'),
('B003', 'H#79 I-10/2', 'ISB', '52000'),

```

```
(N'B004',N'H#78 Mandian', N'ABT', N'53000');
```

```
insert into Staff
```

```
(
staffNo,
fName,
lName,
position,
sex,
DOB,
salary,
branchNo
)
VALUES
(
N'SA9', N'Mary', N'Howe', N'Assistant', N'F',CAST(0x0000641000000000 AS DateTime),
CAST(9000 AS Decimal(18, 0)),N'B002'
),
(N'SG14', N'David', N'Ford', N'Supervisor', N'M',
CAST(0x0000531200000000 AS DateTime), CAST(18000 AS Decimal(18,0)),
N'B003'),
(N'SG37', N'Ann', N'Beech', N'Assistant', N'F',
CAST(0x000056D400000000 AS DateTime), CAST(12000 AS Decimal(18,0)),
N'B003'),
(N'SG5',N'Susan', N'Brand', N'Manager', N'F',
CAST(0x0000C85800000000 AS DateTime), CAST(24000 AS Decimal(18,0)),
N'B003'),
(N'SL21', N'John', N'White', N'Manager', N'M',
CAST(0x0000CFF200000000 AS DateTime), CAST(30000 AS Decimal(18,0)),
N'B004'),
(N'SL41', N'Julie', N'Lee', N'Assistant', N'F',
CAST(0x00005D6000000000 AS DateTime), CAST(9000 AS Decimal(18, 0)),
N'B002');
```

```
insert into Client
```

```
(
clientNo,
fName,
lName,
telNo,
prefType,
maxRent
)
values
(
'B1001', 'Mahad', 'Ali', '030078601', 'yes', 1000.0
),
(
'B1002', 'Sharjeel', 'Khan', '030054621', 'yes', 2000.0
),
(
'B1003', 'Hanzala', 'Shahid', '030456601', 'no', 1500.0
),
(
'B1004', 'Hamza', 'Aslam', '0306446641', 'yes', 8800.0
),
```

```
(
  'B1005', 'Hamza', 'Ahmad', '0354654401', 'noo', 800.0
),
(
  'B1006', 'Usama', 'Fareed', '030074541', 'yes', 4000.0
);
```

```
insert into PrivateOwner
(
  ownerNo,
  fName,
  lName,
  [address],
  telNo
)
values
(
  'B1', 'Azid', 'Ali', 'F18-4A', '0354654264'
),
(
  'B2', 'Mahad', 'Ali', 'F17-4A', '0345154264'
),
(
  'B3', 'Sharjeel', 'Khan', 'F14-7A', '0352354264'
),
(
  'B4', 'Hanzala', 'Shahid', 'F88-4A', '0359354264'
),
(
  'B5', 'Hamza', 'Aslam', 'F11-3A', '0351694264'
),
(
  'B6', 'Hamza', 'Ahmad', 'F19-5A', '0354654264'
);
```

```
insert into PropertyForRent
(
  propertyNo, street, city, postcode, [type], rooms, rent, ownerNo, staffNo, branchNo
)
values
(
  'BF2', 'H2-h2', 'ABT', '22010', 'large', 8, '30000', 'B2', 'SG14', 'B002'
),
(
  'BF3', 'H3-h3', 'ISB', '62010', 'medium', 6, '20000', 'B3', 'SG37', 'B003'
),
(
  'BF4', 'H4-h4', 'ISB', '62010', 'small', 4, '10000', 'B4', 'SG5', 'B004'
);
```

```
insert into Viewing
(
  clientNo,
  propertyNo,
  viewDate,
```

```
comment
)
values
(
'B1002','BF2','2020-2-10','No, i dont wanna say anything'
),
(
'B1003','BF3','2020-3-10','No, i dont wanna say anything'
),
(
'B1004','BF4','2020-4-10','No, i dont wanna say anything'
);
```

```
insert into Viewing
(
clientNo,
propertyNo,
viewDate,
comment
)
values
(
'B1002','BF2','2020-2-10','No, i dont wanna say anything'
),
(
'B1003','BF3','2020-3-10','No, i dont wanna say anything'
),
(
'B1004','BF4','2020-4-10','No, i dont wanna say anything'
);
```

End of qno1

Qno:-2

Answer:-

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

Lab 7

Qno1: -

Answer

```
select distinct(postcode) from Branch
```

Qno2: -

Answer

```
select distinct(fName) from Staff
```

Qno3: -

Answer

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

Qno4: -

Answer

```
select clientNo as [Buyer No], fName as [Baptism Name], lName as [Sur name],  
telNo as [Fax Number], prefType as [Proclivity Type], maxRent as [Supreme Cost] from  
Client;
```

Qno5: -

Answer

```
select * from Staff where salary>10000
```

Qno6: -

Answer

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

Lab 8

Qno1: -

Answer

```
select staffNo,fName,lName,salary from staff order by salary desc
```

Qno2: -

Answer

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

Qno3: -

Answer

```
select count(*) as myCount
from PropertyForRent
where rent<=500
```

Qno4: -

Answer

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

Qno5: -

Answer

```
select count(staffNo) as myCount,sum(salary) as mySalary from staff
where
position='Manager'
```

Qno6: -

Answer

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

Qno7:-

Answer

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

Qno8:-

Answer

```
select *from Staff where salary> any(select salary from Staff where branchNo='B003')
```

Qno9:-

Answer

```
select *from Staff where salary> all(select salary from Staff where branchNo='B003')
```

Individual Solutions:-

1.Hanzala Shahid:-

```
create database DreamHome;  
USE DreamHome;  
create table Branch  
(  
branchNo varchar(20) NOT NULL Primary Key,  
street varchar(100) NOT NULL,  
city varchar(50) NOT NULL,  
postcode varchar(20) NOT NULL  
);  
create table Staff  
(  
staffNo varchar(20) NOT NULL PRIMARY KEY,  
fName varchar(50) NOT NULL,  
lName 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 PRIMARY KEY,
fName varchar(50) NOT NULL,
lName 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 PRIMARY KEY,
fName varchar(50) NOT NULL,
lName varchar(50) NOT NULL,
address varchar(50) NOT NULL,
telNo varchar(20) NOT NULL
);
create table PropertyForRent
(
propertyNo varchar(20) NOT NULL PRIMARY 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
('B001','H#7 I-10/2', 'ISB', '52000'),
('B002','H#78 Supply', 'ABT', '53000'),
('B003','H#79 I-10/2', 'ISB', '52000'),
('B004','H#78 Mandian', 'ABT', '53000');

```

```

insert into Staff
(
staffNo,
fName,
lName,
position,
sex,
DOB,
salary,
branchNo
)
VALUES
(
N'SA9', N'Mary', N'Howe', N'Assistant', N'F', CAST(0x0000641000000000 AS DateTime),
CAST(9000 AS Decimal(18, 0)), N'B002'
),
(N'SG14', N'David', N'Ford', N'Supervisor', N'M',
CAST(0x0000531200000000 AS DateTime), CAST(18000 AS Decimal(18,0)),
N'B003'),
(N'SG37', N'Ann', N'Beech', N'Assistant', N'F',
CAST(0x000056D400000000 AS DateTime), CAST(12000 AS Decimal(18,0)),
N'B003'),
(N'SG5', N'Susan', N'Brand', N'Manager', N'F',
CAST(0x0000C85800000000 AS DateTime), CAST(24000 AS Decimal(18,0)),
N'B003'),
(N'SL21', N'John', N'White', N'Manager', N'M',
CAST(0x0000CFF200000000 AS DateTime), CAST(30000 AS Decimal(18,0)),
N'B004'),
(N'SL41', N'Julie', N'Lee', N'Assistant', N'F',
CAST(0x00005D6000000000 AS DateTime), CAST(9000 AS Decimal(18, 0)),
N'B002');

```

```

insert into Client
(
clientNo,
fName,
lName,
telNo,
prefType,
maxRent
)
values
(
'B1001', 'Mahad', 'Ali', '030078601', 'yes', 1000.0
),
(
'B1002', 'Sharjeel', 'Khan', '030054621', 'yes', 2000.0
),
(
'B1003', 'Hanzala', 'Shahid', '030456601', 'no', 1500.0
),
(
'B1004', 'Hamza', 'Aslam', '0306446641', 'yes', 8800.0
),
(

```

```

'B1005', 'Hamza', 'Ahmad', '0354654401', 'noo', 800.0
),
(
'B1006', 'Usama', 'Fareed', '030074541', 'yes', 4000.0
);

```

```

insert into PrivateOwner
(
ownerNo,
fName,
lName,
[address],
telNo
)
values
(
'B1', 'Azid', 'Ali', 'F18-4A', '0354654264'
),
(
'B2', 'Mahad', 'Ali', 'F17-4A', '0345154264'
),
(
'B3', 'Sharjeel', 'Khan', 'F14-7A', '0352354264'
),
(
'B4', 'Hanzala', 'Shahid', 'F88-4A', '0359354264'
),
(
'B5', 'Hamza', 'Aslam', 'F11-3A', '0351694264'
),
(
'B6', 'Hamza', 'Ahmad', 'F19-5A', '0354654264'
);

```

```

insert into PropertyForRent
(
propertyNo, street, city, postcode, [type], rooms, rent, ownerNo, staffNo, branchNo
)
values
(
'BF2', 'H2-h2', 'ABT', '22010', 'large', 8, '30000', 'B2', 'SG14', 'B002'
),
(
'BF3', 'H3-h3', 'ISB', '62010', 'medium', 6, '20000', 'B3', 'SG37', 'B003'
),
(
'BF4', 'H4-h4', 'ISB', '62010', 'small', 4, '10000', 'B4', 'SG5', 'B004'
);

```

```

insert into Viewing
(
clientNo,
propertyNo,
viewDate,
comment

```

```
)  
values  
(  
  'B1002', 'BF2', '2020-2-10', 'No, i dont wanna say anything'  
) ,  
(  
  'B1003', 'BF3', '2020-3-10', 'No, i dont wanna say anything'  
) ,  
(  
  'B1004', 'BF4', '2020-4-10', 'No, i dont wanna say anything'  
) ;
```

```
insert into Viewing  
(  
  clientNo,  
  propertyNo,  
  viewDate,  
  comment  
)  
values  
(  
  'B1002', 'BF2', '2020-2-10', 'No, i dont wanna say anything'  
) ,  
(  
  'B1003', 'BF3', '2020-3-10', 'No, i dont wanna say anything'  
) ,  
(  
  'B1004', 'BF4', '2020-4-10', 'No, i dont wanna say anything'  
) ;
```

End of qno1

Qno:-2

Answer:-

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

```

select distinct(postcode) from Branch

select distinct(fName) from Staff

select staffNo as [Cadre No], fName as [Baptism Name], lName 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], lName 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'

```

Lab 8

```

select staffNo,fName,lName,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-May-04' AND '31-May-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, lName, position, salary
FROM Staff
WHERE (SELECT AVG(salary) FROM Staff) < salary;

select *from Staff where salary> any(select salary from Staff where branchNo='B003')

select *from Staff where salary> all(select salary from Staff where branchNo='B003')

```

2-) Sharjee1 Khan Niazi:

Lab 6

Qno1: -

Answer: -

```
create database DreamHome;

USE DreamHome;

create table Branch
(
Branch_No varchar(18) NOT NULL Primary Key,
Street_No varchar(90) NOT NULL,
City_Name varchar(50) NOT NULL,
postcode int(20) NOT NULL
);

create table Staff
(
Staff_No varchar(20) NOT NULL PRIMARY KEY,
First_N varchar(50) NOT NULL,
Last_N varchar(50) NOT NULL,
position varchar(50) NOT NULL,
sex varchar(1) NOT NULL, DOB Date-Time NOT NULL,
salary DECIMAL NOT NULL,
branch_No varchar(20) NOT NULL References Branch(branch_No)
);

create table Client
(
Client_No varchar(20) NOT NULL PRIMARY KEY,
First_N varchar(50) NOT NULL,
Last_N varchar(50) NOT NULL,
```

```

Tel_No int(20) NOT NULL,
prefType varchar(50) NOT NULL,
maxRent DECIMAL NOT NULL
);

create table PrivateOwner
(
Owner_No varchar(20) NOT NULL PRIMARY KEY,
First_N varchar(50) NOT NULL,
Last_N varchar(50) NOT NULL,
address varchar(50) NOT NULL,
tel_No int(20) NOT NULL
);

create table PropertyForRent
(
Property_No varchar(20) NOT NULL PRIMARY KEY,
Street_NO varchar(100) NOT NULL,
City_Name varchar(50) NOT NULL,
postcode int(20) NOT NULL,
type varchar(10) NOT NULL,
rooms int NOT NULL,
rent DECIMAL NOT NULL,
owner_No varchar(20) References PrivateOwner(owner_No),
staff_No varchar(20) NOT NULL References Staff(staff_No),
branch_No varchar(20) NOT NULL References Branch(branch_No)
);

create table Viewing
(
Client_No varchar(20) NOT NULL References Client(client_No),
Property_No varchar(20) NOT NULL References PropertyForRent(property_No),
View-Date DateTime NOT NULL,
comment varchar(200) NOT NULL
);

```

```
create table Registration
(
Client_No varchar(20) NOT NULL References Client(client_No),
Branch_No varchar(20) NOT NULL References Branch(branch_No),
Staff_No varchar(20) NOT NULL References Staff(staff_No),
Date-Joined Date-Time NOT NULL
);
```

```
INSERT into Branch
```

```
(
Branch_No,
Street_no,
City_Name,
postcode
)
```

```
VALUES
```

```
(N'B001',N'H#7 I-10/2', N'ISB', N'52000'),
(N'B002',N'H#78 Supply', N'ABT', N'53000'),
(N'B003',N'H#79 I-10/2', N'ISB', N'52000'),
(N'B004',N'H#78 Mandian', N'ABT', N'53000');
```

```
insert into Staff
```

```
(
Staff_No,
First_N,
Last_N,
position,
sex,
DOB,
salary,
branch_No
```



```

)
VALUES
(
N'SA9', N'Mary', N'Howe', N'Assistant', N'F', CAST(0x0000641000000000 AS Date-Time),
CAST(9000 AS Decimal(18, 0)), N'B002'
),
(N'SG14', N'David', N'Ford', N'Supervisor', N'M',
CAST(0x0000531200000000 AS Date-Time), CAST(18000 AS Decimal(18,0)),
N'B003'),
(N'SG37', N'Ann', N'Beech', N'Assistant', N'F',
CAST(0x000056D400000000 AS Date-Time), CAST(12000 AS Decimal(18,0)),
N'B003'),
(N'SG5', N'Susan', N'Brand', N'Manager', N'F',
CAST(0x0000C85800000000 AS Date-Time), CAST(24000 AS Decimal(18,0)),
N'B003'),
(N'SL21', N'John', N'White', N'Manager', N'M',
CAST(0x0000CFF200000000 AS Date-Time), CAST(30000 AS Decimal(18,0)),
N'B004'),
(N'SL41', N'Julie', N'Lee', N'Assistant', N'F',
CAST(0x00005D6000000000 AS Date-Time), CAST(9000 AS Decimal(18, 0)),
N'B002');

```

```

insert into Client

```

```

(
Client_No,
First_N,
Last_N,
Tel_No,
prefType,
maxRent
)

```

```

values

```

```
(
'B1001','Mahad','Ali','030078601','yes',1000.0
),
(
'B1002','Sharjeel','Khan','030054621','yes',2000.0
),
(
'B1003','Hanzala','Shahid','030456601','no',1500.0
),
(
'B1004','Hamza','Aslam','0306446641','yes',8800.0
),
(
'B1005','Hamza','Ahmad','0354654401','noo',800.0
),
(
'B1006','Usama','Fareed','030074541','yes',4000.0
),
(
'B1007','Abdullah','Niazi','03359613366','yes',2500.0
);
```

```
insert into PrivateOwner
```

```
(
Owner_No,
First_n,
Last_n,
[address],
Tel_No
)
values
(
```

```
'B1','Azid','Ali','F18-4A','0354654264'
),
(
'B2','Mahad','Ali','F17-4A','0345154264'
),
(
'B3','Sharjeel','Khan','F14-7A','0352354264'
),
(
'B4','Hanzala','Shahid','F88-4A','0359354264'
),
(
'B5','Hamza','Aslam','F11-3A','0351694264'
),
(
'B6','Hamza','Ahmad','F19-5A','0354654264'
)'
(
'B7','Abdullah','Niazi','F18-5A','03359613366'
);
```

```
insert into PropertyForRent
```

```
(
Property_No,street_NO,city_Name,postcode,[type],rooms,rent,owner_No,staff_No,branch_No
)
values
(
'BF2','H2-h2','ABT','22010','large',8,'30000','B2','SG14','B002'
),
(
'BF3','H3-h3','ISB','62010','medium',6,'20000','B3','SG37','B003'
),
```

```
(  
  'BF4','H4-h4','ISB','62010','small',4,'10000','B4','SG5','B004'  
);
```

```
insert into Viewing
```

```
(  
  Client_No,  
  Property_No,  
  View-Date,  
  comment  
)  
values  
(  
  'B1002','BF2','2020-2-10','No, i dont wanna say anything'  
,  
(  
  'B1003','BF3','2020-3-10','No, i dont wanna say anything'  
,  
(  
  'B1004','BF4','2020-4-10','No, i dont wanna say anything'  
);
```

```
insert into Viewing
```

```
(  
  Client_No,  
  Property_No,  
  View-Date,  
  comment  
)  
values  
(  
  'B1002','BF2','2020-2-10','No, i dont wanna say anything'
```

```

),
(
'B1003','BF3','2020-3-10','No, i dont wanna say anything'
),
(
'B1004','BF4','2020-4-10','No, i dont wanna say anything'
);

```

End of qno1

Qno:-2

Answer:-

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

Lab 7:-

```
select distinct(postcode) from Branch
```

```
select distinct(fName) from Staff
```

```
select staffNo as [Cadre No], fName as [Baptism Name], lName 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], lName 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'
```

Lab 8

```
select staffNo,fName,lName,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-May-04' AND '31-May-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, lName, position, salary
FROM Staff
WHERE (SELECT AVG(salary) FROM Staff) < salary;

select *from Staff where salary> any(select salary from Staff where branchNo='B003')

select *from Staff where salary> all(select salary from Staff where branchNo='B003')

```

Abdullah Niazi

Fa18-bcs-004

Lab 6

Qno1:-

Answer:-

create database HomeSweetHome;

USE HomeSweetHome;

create table Branch

(

branchNumber varchar(25) NOT NULL Primary Key,

streetNumber varchar(110) NOT NULL,

```
cityName varchar(60) NOT NULL,  
postcodeNumber int NOT NULL  
);  
  
create table Staff  
(  
    staffNumber int NOT NULL PRIMARY KEY,  
    firstName varchar(50) NOT NULL,  
    lastName varchar(50) NOT NULL,  
    position varchar(50) NOT NULL,  
    sex char NOT NULL, DOB DateTime NOT NULL,  
    salary DECIMAL NOT NULL,  
    branchNumber varchar(25) NOT NULL References Branch(branchNumber)  
);  
  
create table Client  
(  
    clientNumber varchar(20) NOT NULL PRIMARY KEY,  
    firstName varchar(50) NOT NULL,  
    lastName varchar(50) NOT NULL,  
    phoneNo int NOT NULL,  
    prefType varchar(50) NOT NULL,  
    maxRent DECIMAL NOT NULL  
);  
  
create table PrivateOwner  
(  
    ownerNumber varchar(20) NOT NULL PRIMARY KEY,
```

```
firstName varchar(50) NOT NULL,
lastName varchar(50) NOT NULL,
address varchar(50) NOT NULL,
phoneNo int NOT NULL
);

create table PropertyForRent
(
propertyNumber varchar(20) NOT NULL PRIMARY KEY,
streetNumber varchar(100) NOT NULL,
cityName varchar(50) NOT NULL,
postcodeNumber int NOT NULL,
type varchar(10) NOT NULL,
rooms int NOT NULL,
rent DECIMAL NOT NULL,
ownerNumber varchar(20) References PrivateOwner(ownerNumber),
staffNumber varchar(20) NOT NULL References Staff(staffNumber),
branchNumber varchar(20) NOT NULL References Branch(branchNumber)
);

create table Viewing
(
clientNumber varchar(20) NOT NULL References Client(clientNumber),
propertyNumber varchar(20) NOT NULL References
PropertyForRent(propertyNumber),
viewDate DateTime NOT NULL,
comment varchar(200) NOT NULL
);
```


create table Registration

```
(  
clientNumber varchar(20) NOT NULL References Client(clientNumber),  
branchNumber varchar(20) NOT NULL References Branch(branchNumber),  
staffNumber varchar(20) NOT NULL References Staff(staffNumber),  
dateJoined DateTime NOT NULL  
);
```

INSERT into Branch

```
(  
branchNumber,  
streetNumber,  
cityNumber,  
postcodeNumber  
)
```

VALUES

```
(N'B001',N'H#7 I-10/2', N'ISB', N'52000'),  
(N'B002',N'H#78 Supply', N'ABT', N'53000'),  
(N'B003',N'H#79 I-10/2', N'ISB', N'52000'),  
(N'B004',N'H#78 Mandian', N'ABT', N'53000');
```

insert into Staff

```
(  
staffNumber,  
firstName,
```

lastName,
position,
sex,
DOB,
salary,
branchNumber

)

VALUES

(

(N'SA9', N'Mary', N'Howe', N'Assistant', N'F', CAST(0x0000641000000000 AS
DateTime),

CAST(9000 AS Decimal(18, 0)), N'B002'

),

(N'SG14', N'David', N'Ford', N'Supervisor', N'M',

CAST(0x0000531200000000 AS DateTime), CAST(18000 AS Decimal(18,0)),
N'B003'),

(N'SG37', N'Ann', N'Beech', N'Assistant', N'F',

CAST(0x000056D400000000 AS DateTime), CAST(12000 AS Decimal(18,0)),
N'B003'),

(N'SG5', N'Susan', N'Brand', N'Manager', N'F',

CAST(0x0000C85800000000 AS DateTime), CAST(24000 AS Decimal(18,0)),
N'B003'),

(N'SL21', N'John', N'White', N'Manager', N'M',

CAST(0x0000CFF200000000 AS DateTime), CAST(30000 AS Decimal(18,0)),
N'B004'),

(N'SL41', N'Julie', N'Lee', N'Assistant', N'F',

```
CAST(0x00005D6000000000 AS DateTime), CAST(9000 AS Decimal(18, 0)),  
N'B002');
```

```
insert into Client
```

```
(  
clientNumber,  
firstName,  
lastName,  
PhoneNumber,  
prefType,  
maxRent
```

```
)
```

```
values
```

```
(
```

```
'B1001','Mahad','Ali','030078601','yes',1000.0
```

```
),
```

```
(
```

```
'B1002','Sharjeel','Khan','030054621','yes',2000.0
```

```
),
```

```
(
```

```
'B1003','Hanzala','Shahid','030456601','no',1500.0
```

```
),
```

```
(
```

```
'B1004','Hamza','Aslam','0306446641','yes',8800.0
```

```
),
```

```
(
```

```
'B1005','Hamza','Ahmad','0354654401','noo',800.0
),
(
'B1006','Usama','Fareed','030074541','yes',4000.0
),
(
'B1007','Abdullah','Niazi','03359613366','yes',2500.0
);
```

```
insert into PrivateOwner
```

```
(
ownerNumber,
firstName,
lastName,
[address],
PhoneNumber
)
```

```
values
```

```
(
'B1','Azid','Ali','F18-4A','0354654264'
),
(
'B2','Mahad','Ali','F17-4A','0345154264'
),
(
'B3','Sharjeel','Khan','F14-7A','0352354264'
```

```
),  
(  
'B4','Hanzala','Shahid','F88-4A','0359354264'  
)  
(  
'B5','Hamza','Aslam','F11-3A','0351694264'  
)  
(  
'B6','Hamza','Ahmad','F19-5A','0354654264'  
)  
(  
'B7','Abdullah','Niazi','F18-5A','03359613366'  
);
```

insert into PropertyForRent

```
(  
propertyNumber,streetNumber,cityName,postcodeNumber,[type],rooms,rent,owne  
rNumnber,staffNumber,branchNumber  
)
```

values

```
(  
'BF2','H2-h2','ABT','22010','large',8,'30000','B2','SG14','B002'  
)  
(  
'BF3','H3-h3','ISB','62010','medium',6,'20000','B3','SG37','B003'  
)
```

```
(  
  'BF4','H4-h4','ISB','62010','small',4,'10000','B4','SG5','B004'  
);
```

insert into Viewing

```
(  
  clientNumber,  
  propertyNumber,  
  viewDate,  
  comment  
)
```

values

```
(  
  'B1002','BF2','2020-2-10','No, i dont wanna say anything'  
),  
(  
  'B1003','BF3','2020-3-10','No, i dont wanna say anything'  
),  
(  
  'B1004','BF4','2020-4-10','No, i dont wanna say anything'  
);
```

insert into Viewing

```
(  
  clientNumber,  
  propertyNumber,
```

```
viewDate,  
comment  
)  
values  
(  
'B1002','BF2','2020-2-10','No, i dont wanna say anything'  
,  
(  
'B1003','BF3','2020-3-10','No, i dont wanna say anything'  
,  
(  
'B1004','BF4','2020-4-10','No, i dont wanna say anything'  
);
```

Qno:-2

Answer:-

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

Lab 7

Qno1:-

Answer

```
select distinct(postcodeNumber) from Branch
```

Qno2:-

Answer

```
select distinct(firstName) from Staff
```

Qno3:-

Answer

```
select staffNumber as [Cadre No], firstName as [Baptism Name], lastName as [Sur  
name],  
position as [Locale], sex as [Gender],DOB as [Birtday] ,salary as Income,  
branchNumber as [Section No] from Staff
```

Qno4:-

Answer

```
select clientNumber as [Buyer No], firstName as [Baptism Name], lastName as  
[Sur name],  
PhoneNumber as [Fax Number],prefType as [Proclivity Type],maxRent as  
[Supreme Cost] from Client;
```

Qno5:-

Answer

```
select * from Staff where salary>10000
```

Qno6:-

Answer

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

Lab 8

Qno1:-

Answer

```
select staffNumber,firstName,lastName,salary from staff order by salary desc
```

Qno2:-

Answer

```
select propertyNumber,type,rooms,rent from PropertyForRent
```

```
order by type
```

```
select propertyNumber,type,rooms,rent
```

```
from PropertyForRent
```

```
order by type,rent desc
```

Qno3:-

Answer

```
select count(*) as myCount
```

```
from PropertyForRent
```

```
where rent<=500
```

Qno4:-

Answer

```
select count(Distinct propertyNumber) As myCount from Viewing
```

```
WHERE viewDate BETWEEN '1-May-04' AND '31-May-04';
```

Qno5:-

Answer

```
select count(staffNumber) as myCount,sum(salary) as mySalary from staff
```

```
where
```

position='Manager'

Qno6:-

Answer

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

Qno7:-

Answer

```
SELECT staffNumber, firstName, lastName, position, salary  
FROM Staff  
WHERE (SELECT AVG(salary) FROM Staff) < salary;
```

Qno8:-

Answer

```
select *from Staff where salary> any(select salary from Staff where  
branchNumber='B003')
```

Qno9:-

Answer

```
select *from Staff where salary> all(select salary from Staff where  
branchNumber='B003')
```

Hamza Aslam

Fa18-bcs-004

Lab 6

Qno1:-

Answer:-

```
create database HomeSweetHome;
```

```
USE HomeSweetHome;
```

```
create table Branch
```

```
(
```

```
branchNumber varchar(25) NOT NULL Primary Key,
```

```
streetNumber varchar(110) NOT NULL,
```

```
cityName varchar(60) NOT NULL,
```

```
postcodeNumber int NOT NULL
```

```
);
```

```
create table Staff
```

```
(
```

```
staffNumber int NOT NULL PRIMARY KEY,
```

```
firstName varchar(50) NOT NULL,
```

```
lastName varchar(50) NOT NULL,
```

```
position varchar(50) NOT NULL,
```

```
sex char NOT NULL, DOB DateTime NOT NULL,
```

```
salary DECIMAL NOT NULL,
```

```
branchNumber varchar(25) NOT NULL References Branch(branchNumber)
```

```
);
```

```
create table Client
```

```
(
```

```
clientNumber varchar(20) NOT NULL PRIMARY KEY,
```

```
firstName varchar(50) NOT NULL,  
lastName varchar(50) NOT NULL,  
phoneNo int NOT NULL,  
prefType varchar(50) NOT NULL,  
maxRent DECIMAL NOT NULL  
);
```

```
create table PrivateOwner
```

```
(  
ownerNumber varchar(20) NOT NULL PRIMARY KEY,  
firstName varchar(50) NOT NULL,  
lastName varchar(50) NOT NULL,  
address varchar(50) NOT NULL,  
phoneNo int NOT NULL  
);
```

```
create table PropertyForRent
```

```
(  
propertyNumber varchar(20) NOT NULL PRIMARY KEY,  
streetNumber varchar(100) NOT NULL,  
cityName varchar(50) NOT NULL,  
postcodeNumber int NOT NULL,  
type varchar(10) NOT NULL,  
rooms int NOT NULL,  
rent DECIMAL NOT NULL,  
ownerNumber varchar(20) References PrivateOwner(ownerNumber),  
staffNumber varchar(20) NOT NULL References Staff(staffNumber),
```

```
branchNumber varchar(20) NOT NULL References Branch(branchNumber)
);
```

```
create table Viewing
```

```
(
clientNumber varchar(20) NOT NULL References Client(clientNumber),
propertyNumber varchar(20) NOT NULL References
PropertyForRent(propertyNumber),
viewDate DateTime NOT NULL,
comment varchar(200) NOT NULL
);
```

```
create table Registration
```

```
(
clientNumber varchar(20) NOT NULL References Client(clientNumber),
branchNumber varchar(20) NOT NULL References Branch(branchNumber),
staffNumber varchar(20) NOT NULL References Staff(staffNumber),
dateJoined DateTime NOT NULL
);
```

```
INSERT into Branch
```

```
(
branchNumber,
streetNumber,
cityNumber,
postcodeNumber
)
```

VALUES

(N'B001',N'H#7 I-10/2', N'ISB', N'52000'),
(N'B002',N'H#78 Supply', N'ABT', N'53000'),
(N'B003',N'H#79 I-10/2', N'ISB', N'52000'),
(N'B004',N'H#78 Mandian', N'ABT', N'53000');

insert into Staff

(
staffNumber,
firstName,
lastName,
position,
sex,
DOB,
salary,
branchNumber
)

VALUES

(
N'SA9', N'Mary', N'Howe', N'Assistant', N'F',CAST(0x0000641000000000 AS
DateTime),
CAST(9000 AS Decimal(18, 0)),N'B002'
,
(N'SG14', N'David', N'Ford', N'Supervisor', N'M',
CAST(0x0000531200000000 AS DateTime), CAST(18000 AS Decimal(18,0)),
N'B003'),

```
(N'SG37', N'Ann', N'Beech', N'Assistant', N'F',  
CAST(0x000056D400000000 AS DateTime), CAST(12000 AS Decimal(18,0)),  
N'B003'),  
(N'SG5', N'Susan', N'Brand', N'Manager', N'F',  
CAST(0x0000C85800000000 AS DateTime), CAST(24000 AS Decimal(18,0)),  
N'B003'),  
(N'SL21', N'John', N'White', N'Manager', N'M',  
CAST(0x0000CFF200000000 AS DateTime), CAST(30000 AS Decimal(18,0)),  
N'B004'),  
(N'SL41', N'Julie', N'Lee', N'Assistant', N'F',  
CAST(0x00005D6000000000 AS DateTime), CAST(9000 AS Decimal(18, 0)),  
N'B002');
```

insert into Client

```
(  
clientNumber,  
firstName,  
lastName,  
PhoneNumber,  
prefType,  
maxRent  
)  
values  
(  
'B1001', 'Mahad', 'Ali', '030078601', 'yes', 1000.0  
)
```

```
(  
  'B1002','Sharjeel','Khan','030054621','yes',2000.0  
)  
(  
  'B1003','Hanzala','Shahid','030456601','no',1500.0  
)  
(  
  'B1004','Hamza','Aslam','0306446641','yes',8800.0  
)  
(  
  'B1005','Hamza','Ahmad','0354654401','noo',800.0  
)  
(  
  'B1006','Usama','Fareed','030074541','yes',4000.0  
)  
(  
  'B1007','Abdullah','Niazi','03359613366','yes',2500.0  
);
```

```
insert into PrivateOwner
```

```
(  
  ownerNumber,  
  firstName,  
  lastName,  
  [address],  
  PhoneNumber
```


)

values

(

'B1','Azid','Ali','F18-4A','0354654264'

),

(

'B2','Mahad','Ali','F17-4A','0345154264'

),

(

'B3','Sharjeel','Khan','F14-7A','0352354264'

),

(

'B4','Hanzala','Shahid','F88-4A','0359354264'

),

(

'B5','Hamza','Aslam','F11-3A','0351694264'

),

(

'B6','Hamza','Ahmad','F19-5A','0354654264'

)

(

'B7','Abdullah','Niazi','F18-5A','03359613366'

);

insert into PropertyForRent

(

propertyNumber,streetNumber,cityName,postcodeNumber,[type],rooms,rent,ownerNumnber,staffNumber,branchNumber

)

values

(

'BF2','H2-h2','ABT','22010','large',8,'30000','B2','SG14','B002'

),

(

'BF3','H3-h3','ISB','62010','medium',6,'20000','B3','SG37','B003'

),

(

'BF4','H4-h4','ISB','62010','small',4,'10000','B4','SG5','B004'

);

insert into Viewing

(

clientNumber,

propertyNumber,

viewDate,

comment

)

values

(

'B1002','BF2','2020-2-10','No, i dont wanna say anything'

),

(

```
'B1003','BF3','2020-3-10','No, i dont wanna say anything'  
,  
(  
'B1004','BF4','2020-4-10','No, i dont wanna say anything'  
);
```

insert into Viewing

```
(  
clientNumber,  
propertyNumber,  
viewDate,  
comment  
)  
values  
(  
'B1002','BF2','2020-2-10','No, i dont wanna say anything'  
,  
(  
'B1003','BF3','2020-3-10','No, i dont wanna say anything'  
,  
(  
'B1004','BF4','2020-4-10','No, i dont wanna say anything'  
);
```

Qno:-2

Answer:-

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

Lab 7

Qno1:-

Answer

```
select distinct(postcodeNumber) from Branch
```

Qno2:-

Answer

```
select distinct(firstName) from Staff
```

Qno3:-

Answer

```
select staffNumber as [Cadre No], firstName as [Baptism Name], lastName as [Sur  
name],  
position as [Locale], sex as [Gender], DOB as [Birtday] ,salary as Income,  
branchNumber as [Section No] from Staff
```

Qno4:-

Answer

```
select clientNumber as [Buyer No], firstName as [Baptism Name], lastName as  
[Sur name],  
PhoneNumber as [Fax Number], prefType as [Proclivity Type], maxRent as  
[Supreme Cost] from Client;
```

Qno5:-

Answer

```
select * from Staff where salary>10000
```

Qno6:-

Answer

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

Lab 8

Qno1:-

Answer

```
select staffNumber,firstName,lastName,salary from staff order by salary desc
```

Qno2:-

Answer

```
select propertyNumber,type,rooms,rent from PropertyForRent
```

```
order by type
```

```
select propertyNumber,type,rooms,rent
```

```
from PropertyForRent
```

```
order by type,rent desc
```

Qno3:-

Answer

```
select count(*) as myCount
```

```
from PropertyForRent
```

```
where rent<=500
```

Qno4:-

Answer

```
select count(Distinct propertyNumber) As myCount from Viewing  
WHERE viewDate BETWEEN '1-May-04' AND '31-May-04';
```

Qno5:-

Answer

```
select count(staffNumber) as myCount,sum(salary) as mySalary from staff  
where  
position='Manager'
```

Qno6:-

Answer

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

Qno7:-

Answer

```
SELECT staffNumber, firstName, lastName, position, salary  
FROM Staff  
WHERE (SELECT AVG(salary) FROM Staff) < salary;
```

Qno8:-

Answer

```
select *from Staff where salary> any(select salary from Staff where  
branchNumber='B003')
```

Qno9:-

Answer

```
select *from Staff where salary> all(select salary from Staff where  
branchNumber='B003')
```

Hamza Ahmad

FA18-BCS-084

Qno1:-

Answer:-

```
create database DreamHome;  
USE DreamHome;  
create table Branch  
(  
branchNo varchar(20) NOT NULL Primary Key,  
street varchar(100) NOT NULL,  
city varchar(50) NOT NULL,  
postcode varchar(20) NOT NULL  
);  
create table Staff  
(  
staffNo varchar(20) NOT NULL PRIMARY KEY,  
fName varchar(50) NOT NULL,  
lName 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 PRIMARY KEY,  
fName varchar(50) NOT NULL,  
lName 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 PRIMARY KEY,
fName varchar(50) NOT NULL,
lName varchar(50) NOT NULL,
address varchar(50) NOT NULL,
telNo varchar(20) NOT NULL
);
create table PropertyForRent
(
propertyNo varchar(20) NOT NULL PRIMARY 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
('B001','H#7 I-10/2', 'ISB', '52000'),
('B002','H#78 Supply', 'ABT', '53000'),
('B003','H#79 I-10/2', 'ISB', '52000'),
('B004','H#78 Mandian', 'ABT', '53000');

```

insert into Staff

```

(
staffNo,
fName,
lName,
position,
sex,
DOB,
salary,

```



```

branchNo
)
VALUES
(
N'SA9', N'Mary', N'Howe', N'Assistant', N'F', CAST(0x0000641000000000 AS DateTime),
CAST(9000 AS Decimal(18, 0)), N'B002'
),
(N'SG14', N'David', N'Ford', N'Supervisor', N'M',
CAST(0x0000531200000000 AS DateTime), CAST(18000 AS Decimal(18,0)),
N'B003'),
(N'SG37', N'Ann', N'Beech', N'Assistant', N'F',
CAST(0x000056D400000000 AS DateTime), CAST(12000 AS Decimal(18,0)),
N'B003'),
(N'SG5', N'Susan', N'Brand', N'Manager', N'F',
CAST(0x0000C85800000000 AS DateTime), CAST(24000 AS Decimal(18,0)),
N'B003'),
(N'SL21', N'John', N'White', N'Manager', N'M',
CAST(0x0000CFF200000000 AS DateTime), CAST(30000 AS Decimal(18,0)),
N'B004'),
(N'SL41', N'Julie', N'Lee', N'Assistant', N'F',
CAST(0x00005D6000000000 AS DateTime), CAST(9000 AS Decimal(18, 0)),
N'B002');

```

```

insert into Client
(
clientNo,
fName,
lName,
telNo,
prefType,
maxRent
)
values
(
'B1001', 'Mahad', 'Ali', '030078601', 'yes', 1000.0
),
(
'B1002', 'Sharjeel', 'Khan', '030054621', 'yes', 2000.0
),
(
'B1003', 'Hanzala', 'Shahid', '030456601', 'no', 1500.0
),
(
'B1004', 'Hamza', 'Aslam', '0306446641', 'yes', 8800.0
),
(
'B1005', 'Hamza', 'Ahmad', '0354654401', 'noo', 800.0
),
(
'B1006', 'Usama', 'Fareed', '030074541', 'yes', 4000.0
);

```

```

insert into PrivateOwner
(
ownerNo,
fName,

```

```

lName,
[address],
telNo
)
values
(
'B1', 'Azid', 'Ali', 'F18-4A', '0354654264'
),
(
'B2', 'Mahad', 'Ali', 'F17-4A', '0345154264'
),
(
'B3', 'Sharjeel', 'Khan', 'F14-7A', '0352354264'
),
(
'B4', 'Hanzala', 'Shahid', 'F88-4A', '0359354264'
),
(
'B5', 'Hamza', 'Aslam', 'F11-3A', '0351694264'
),
(
'B6', 'Hamza', 'Ahmad', 'F19-5A', '0354654264'
);

```

```

insert into PropertyForRent
(
propertyNo, street, city, postcode, [type], rooms, rent, ownerNo, staffNo, branchNo
)
values
(
'BF2', 'H2-h2', 'ABT', '22010', 'large', 8, '30000', 'B2', 'SG14', 'B002'
),
(
'BF3', 'H3-h3', 'ISB', '62010', 'medium', 6, '20000', 'B3', 'SG37', 'B003'
),
(
'BF4', 'H4-h4', 'ISB', '62010', 'small', 4, '10000', 'B4', 'SG5', 'B004'
);

```

```

insert into Viewing
(
clientNo,
propertyNo,
viewDate,
comment
)
values
(
'B1002', 'BF2', '2020-2-10', 'No, i dont wanna say anything'
),
(
'B1003', 'BF3', '2020-3-10', 'No, i dont wanna say anything'
),
(
'B1004', 'BF4', '2020-4-10', 'No, i dont wanna say anything'
);

```

```
);
```

```
insert into Viewing
(
  clientNo,
  propertyNo,
  viewDate,
  comment
)
values
(
  'B1002', 'BF2', '2020-2-10', 'No, i dont wanna say anything'
),
(
  'B1003', 'BF3', '2020-3-10', 'No, i dont wanna say anything'
),
(
  'B1004', 'BF4', '2020-4-10', 'No, i dont wanna say anything'
);
```

End of qno1

Qno:-2

Answer:-

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

Lab 7

Qno1: -

Answer

```
select distinct(postcode) from Branch
```

Qno2: -

Answer

```
select distinct(fName) from Staff
```

Qno3: -

Answer

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

Qno4: -

Answer

```
select clientNo as [Buyer No], fName as [Baptism Name], lName as [Sur name],  
telNo as [Fax Number],prefType as [Proclivity Type],maxRent as [Supreme Cost] from  
Client;
```

Qno5: -

Answer

```
select * from Staff where salary>10000
```

Qno6: -

Answer

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

Lab 8

Qno1: -

Answer

```
select staffNo, fName, lName, salary from staff order by salary desc
```

Qno2: -

Answer

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

Qno3: -

Answer

```
select count(*) as myCount
from PropertyForRent
where rent <= 500
```

Qno4: -

Answer

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

Qno5: -

Answer

```
select count(staffNo) as myCount, sum(salary) as mySalary from staff
where
position = 'Manager'
```

Qno6: -

Answer

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

Qno7: -

Answer

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

Qno8: -

Answer

```
select *from Staff where salary> any(select salary from Staff where branchNo='B003')
```

Qno9: -

Answer

```
select *from Staff where salary> all(select salary from Staff where branchNo='B003')
```

Usama Farid

FA18-BCS-006

Create database DreamHome;

USE DreamHome;

Create table Branch

```
(
branch No varchar(20)NOTNULL PrimaryKey,
street varchar(100)NOTNULL,
city varchar(20)NOTNULL,
postcode varchar(20)NOTNULL
);
```

CreatetABLE

```
(
staff No varchar(20)NOTNULL PRIMARYKEY,
fName varchar(15)NOTNULL,
lName varchar(15)NOTNULL,
```

```
position varchar(15)NOTNULL,  
sex varchar(15)NOTNULL,DOB DateTimeNOTNULL,  
salary DECIMALNOTNULL,  
branchNo varchar(15)NOTNULLReferences Branch(branchNo)  
);
```

```
createtable Client
```

```
(  
client No varchar(20)NOTnullPRIMARYKY,  
fName varchar(50)NOTNULL,  
lName varchar(50)NOTNULL,  
telNo varchar(20)NOTNULL,  
PREFType varchar(50)NOTNULL,  
maxRent DECIMALNOTNULL,  
);
```

```
CreatetablePrivateOwner
```

```
(  
ownerNo varchar(20)NOTnullPRIMARYKY,  
fName varchar(15)NOTNULL,  
lName varchar(15)NOTNULL,  
telNo varchar(15)NOTNULL,  
);
```

```
CreatetablePropertyForRent
```

```
(  
property No varchar(20)NOTnullPRIMARYKY,  
street varchar(50)NOTNULL,  
city varchar(15)NOTNULL,  
postcode (15)NOTNULL,  
rooms intNOTNULL,  
rent DECIMALNOTNULL,
```

```

ownerNo varchar(20) References PrivateOwner(ownerNo);
staffNo varchar(20) References PrivateOwner(staffNo);
branchNo varchar(20) References PrivateOwner(branchNo);
);

createtable Viewing
(
clientNo varchar(20)NOTNULL References client(clientNo),
propertyNo varchar(15)NOTNULL References client(clientNo),
viewDateTimeNOTNULL,
COMMENT varchar(150)NOTNULL
);

createtable Registration
(
clientNovarchar(50)NOTNULL References client(clientNo),
branchNovarchar(50)NOTNULL References Branch(branchNo),
staffNovarchar(50)NOTNULL References Staff(staffNo),
dateJoinedDateTimeNOTNULL
);

INSERTinto Branch
(
branchNo,
street,
city,
postcode
)
VALUES
(N 'B005'N'H#7 I-12/2',N'KAR' '50000'),

(N 'B006'N'H#75 supply',N'ABT' '54000'),

```



```
(N 'B007'N'H#79 I-14/2',N'ISB' '55000'),  
(N 'B008'N'H#78 Mandian',N'LHR' '55000'),
```

Insert into Client

```
(  
ClientNo,  
fName,  
lName,  
telNo,  
prefType,  
maxRent  
)  
values  
(  
'81001','Ali','0312789653','yes',1000.0  
,  
(  
'81001','Nabeel','0312789753','yes',1500.0  
,  
(  
'81001','usman','0312789153','no',1800.0  
,  
(  
'81001','Ahmed','0312789253','yes',1300.0  
,  
(  
'81001','Akhtar','0312789553','yes',14400.0
```

```
),
(
'81001','Sohail','0312789553','no',1300.0
),
insert into private owner
{
ownnerNo,
fNAME,
lName,
[adress],
telNo,
values
(
'B1','Ali','Jamal',F18-4a',0354654264
),
(
'B2','Ajmal','Akmal',F17-4a',0354654264,
),
(
'B3','Khatak','Kamran',F16-4a',03541654264
),
(
'B4','Adnan','Amir',F19-4a',03554654264
),
(
'B5','Inam','Akhtar',F14-4a',03554654264
),
(
'b6','adnan','Umair',F13-4a',03584654264
```

),

insertinto viewing

(

Clientno,

PropertyNo,

viewData

comment

)

values

(

'B1001',BF2','2020-3-10','HELLO HOW ARE YOU'

),

(

'B1002',BF3','2020-3-10','HELLO HOW ARE YOU'

),

(

'B1003',BF4','2020-5-10','HELLO HOW ARE YOU'

),

Question 2

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

Mistakes review by Mahad:-

- He didn't put spaces in his tables name.
- He didn't put spaces in any queries.
- Didn't provided some table names.

Lab 7

Qno1: -

Answer

```
select distinct(postcode) from Branch
```

Qno2: -

Answer

```
select distinct(fName) from Staff
```

Qno3: -

Answer

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

Qno4: -

Answer

```
select clientNo as [Buyer No], fName as [Baptism Name], lName as [Sur name],  
telNo as [Fax Number],prefType as [Proclivity Type],maxRent as [Supreme Cost] from  
Client;
```

Qno5: -

Answer

```
select * from Staff where salary>10000
```

Qno6: -

Answer

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

Lab 8

Qno1: -

Answer

```
select staffNo, fName, lName, salary from staff order by salary desc
```

Qno2: -

Answer

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

Qno3: -

Answer

```
select count(*) as myCount
from PropertyForRent
where rent <= 500
```

Qno4: -

Answer

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

Qno5: -

Answer

```
select count(staffNo) as myCount, sum(salary) as mySalary from staff
where
position = 'Manager'
```

Qno6: -

Answer

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

Qno7: -

Answer

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

Qno8: -

Answer

```
select *from Staff where salary> any(select salary from Staff where branchNo='B003')
```

Qno9: -

Answer

```
select *from Staff where salary> all(select salary from Staff where branchNo='B003')
```

Usman jadoon

Create database DreamHome;

USE DreamHome;

Create table Branch

(

branch No varchar(20)NOTNULL PrimaryKey,

street varchar(100)NOTNULL,

city varchar(20)NOTNULL,

postcode varchar(20)NOTNULL

);

Create table

(

staff No varchar(20)NOTNULL PRIMARYKEY,

fName varchar(15)NOTNULL,

lName varchar(15)NOTNULL,

position varchar(15)NOTNULL,

```

sex varchar(15)NOTNULL,DOB DateTimeNOTNULL,
salary DECIMALNOTNULL,
branchNo varchar(15)NOTNULLReferences Branch(branchNo)
);

createtable Client
(
client No varchar(20)NOTnull PRIMARYKEY,
fName varchar(50)NOTNULL,
lName varchar(50)NOTNULL,
telNo varchar(20)NOTNULL,
PREFType varchar(50)NOTNULL,
maxRent DECIMALNOTNULL,
);

CreatetablePrivateOwner
(
ownerNo varchar(20)NOTnullPRIMARYKY,
fName varchar(15)NOTNULL,
lName varchar(15)NOTNULL,
telNo varchar(15)NOTNULL,
);

CreatetablePropertyForRent
(
property No varchar(20)NOTnullPRIMARYKY,
street varchar(50)NOTNULL,
city varchar(15)NOTNULL,
postcode (15)NOTNULL,
rooms intNOTNULL,
rent DECIMALNOTNULL,
ownerNo varchar(20) References PrivateOwner(ownerNo);

```

```

staffNo varchar(20) References PrivateOwner(staffNo);
branchNo varchar(20) References PrivateOwner(branchNo);
);
createtable Viewing
(
clientNo varchar(20)NOTNULL References client(clientNo),
propertyNo varchar(15)NOTNULL References client(clientNo),
viewDateTimeNOTNULL,
COMMENT varchar(150)NOTNULL
);
createtable Registration
(
clientNovarchar(50)NOTNULL References client(clientNo),
branchNovarchar(50)NOTNULL References Branch(branchNo),
staffNovarchar(50)NOTNULL References Staff(staffNo),
dateJoinedDateTimeNOTNULL
);
INSERTinto Branch
(
branchNo,
street,
city,
postcode
)
VALUES
(N 'B005'N'H#7 I-12/2',N'KAR' '50000'),

(N 'B006'N'H#75 supply',N'ABT' '54000'),
(N 'B007'N'H#79 I-14/2',N'ISB' '55000'),

```



```
(N 'B008'N'H#78 Mandian',N'LHR' '55000'),
```

```
Insert into Client
```

```
(
```

```
ClientNo,
```

```
fName,
```

```
lName,
```

```
telNo,
```

```
prefType,
```

```
maxRent
```

```
)
```

```
values
```

```
(
```

```
'81001','Ali','0312789653','yes',1000.0
```

```
),
```

```
(
```

```
'81001','Nabeel','0312789753','yes',1500.0
```

```
),
```

```
(
```

```
'81001','usman','0312789153','no',1800.0
```

```
),
```

```
(
```

```
'81001','Ahmed','0312789253','yes',1300.0
```

```
),
```

```
(
```

```
'81001','Akhtar','0312789553','yes',14400.0
```

```
),
```

```
(
'81001','Sohail','0312789553','no',1300.0
),
insert into private owner
{
ownnerNo,
fNAME,
lName,
[adress],
telno,
values
(
'B1','Ali','Jamal',F18-4a',0354654264
),
(
'B2','Ajmal','Akmal',F17-4a',0354654264,
),
(
'B3','Khatak','Kamran',F16-4a',03541654264
),
(
'B4','Adnan','Amir',F19-4a',03554654264
),
(
'B5','Inam','Akhtar',F14-4a',03554654264
),
(
'b6','adnan','Umair',F13-4a',03584654264
),
```

insertinto viewing

```
(  
Clientno,  
PropertyNo,  
viewData  
comment  
)  
values  
(  
'B1001',BF2','2020-3-10','HELLO HOW ARE YOU'  
,  
(  
'B1002',BF3','2020-3-10','HELLO HOW ARE YOU'  
,  
(  
'B1003',BF4','2020-5-10','HELLO HOW ARE YOU'  
,
```

Question 2

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

Lab 7

Qno1: -

Answer

```
select distinct(postcode) from Branch
```

Qno2: -

Answer

```
select distinct(fName) from Staff
```

Qno3: -

Answer

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

Qno4: -

Answer

```
select clientNo as [Buyer No], fName as [Baptism Name], lName as [Sur name],  
telNo as [Fax Number],prefType as [Proclivity Type],maxRent as [Supreme Cost] from  
Client;
```

Qno5: -

Answer

```
select * from Staff where salary>10000
```

Qno6: -

Answer

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

Lab 8

Qno1: -

Answer

```
select staffNo,fName,lName,salary from staff order by salary desc
```

Qno2: -

Answer

```
select propertyNo,type,rooms,rent from PropertyForRent
```

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

Qno3: -

Answer

```
select count(*) as myCount
from PropertyForRent
where rent<=500
```

Qno4: -

Answer

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

Qno5: -

Answer

```
select count(staffNo) as myCount,sum(salary) as mySalary from staff
where
position='Manager'
```

Qno6: -

Answer

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

Qno7: -

Answer

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

Qno8: -

Answer

```
select *from Staff where salary> any(select salary from Staff where branchNo='B003')
```

Qno9: -

Answer

```
select *from Staff where salary> all(select salary from Staff where branchNo='B003')
```

Mistakes review by Mahad: -

- He didn't put spaces in his tables name.
- He didn't put spaces in any queries.
- Didn't provided some table names.

