

lab-task



COURSE:

Database Systems

Submitted to:

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Topic:

Lab task

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FA18-BCS-092

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FA18-BCS-096

FA18-BCS-022

FA18-BCS-126

Date:

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LAB # 6

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) NOT NULL PRIMARK 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 PRIMARK 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 PRIMARK 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 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,
lName,
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'B005'),
(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', N'Black', N'Manager', N'M',
CAST(0x0000CFF200000000 AS DateTime), CAST(30000 AS Decimal(18,0)),
N'B004'),
(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,
lName,
telNo,
prefType,
maxRent
)
values
(
'B1001','Usman','Maqsood','030078601','yes',1000.0
),
(
'B1002','Sanaulah','Khan','030054621','yes',2000.0
),
(
'B1003','Muzammil','Shahid','030456601','no',1500.0
),
(
'B1004','Ali','Irteza','0306446641','yes',8800.0
),
(
'B1005','Abdul','Wahab','0354654401','no',800.0
),
(
'B1006','Usama','Fareed','030074541','yes',4000.0
);

```

```

insert into PrivateOwner
(
ownerNo,
fName,
lName,
[address],
telNo
)
values
(
'B1','Group','Leader','F18-4A','03105023263'
),
(
'B2','Usman','Maqsood','F17-4A','03105023261'
),
(
'B3','Sanaulah','Khan','F14-7A','0352354264'
),
(
'B4','Muhammad','Muzammil','F88-4A','03105023265'
),
(
'B5','Ali','Irteza','F11-3A','03105023233'
),
(
'B6','Abdul','Wahab','F19-5A','03105023263'
);

```

```

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','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
)
values
(
'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
)
values
(
'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';`

LAB # 7

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], lName 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], lName as [Sur name],  
telNo as [Fax Number], prefType as [Proclivity Type], maxRent as [Supreme Cost] from Client;
```

Question # 5

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

Question # 6

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

Comment _
Reviews _
Rating _

LAB # 8

Question # 1

```
select staffNo, fName, lName, 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
```

Question # 4

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

Question # 5

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


Question # 6

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

Question # 7

```
SELECT staffNo, fName, lName, 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], 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

Usman Maqsood

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

```
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 _



