**DATABASE ASSIGNMENT # 01**

**ID: K201639**

**Name : MUHAMMAD AMAN NADEEM**

Q1: candidate keys:

Branch table: branch no, street, postcode

Staff : staff no

Property forRent:

propertyno, streetno, postcode,ownerNo

Client:

ClientNo, tellNo, email

PrivateOwner:

OwnerNo, tellNo,email

Viewing:

ClientNo, propertyNo

Registration:

ClientNo

Note: I identify the candidates key for each table.

Q2:

Foreign key: branchNo, staffNo, ownerNo, clientNo, PropertyNo, email(can be considered as foreign key because it can be used as primary key for Client table as well).

Q3:

1. Insert into staff values(SA9, 'Scott', 'Jeff', 'Clerk', 1, '1977-10-01', 58000, B007);
2. Insert into Registration values (CR56, ' ', ' ', '1990-12-07');
3. Delete from Branch where branchNo = ‘B002’;
4. Delete from PrivateOwner where Name = ‘Tony Shaw’;
5. Update VIEWING SET clientNo = ‘CR97’ where clientNo = ‘CR62’;
6. Update PropertyForRent set propertyNo = ‘PA16’ where propertyNo = ‘PA14’;
7. Update PropertyForRent set branchNo = ‘NULL’ where branchNo = ‘B007’;

Q4:

1. alter TABLE Staff (DOB varchar(20) NOT NULL, Salary INT NOT NULL, fname varchar(20) NOT NULL, lName varchar(20) NOT NULL, position varchar(20) NOT NULL, sex CHAR(1) NOT NULL) ) add constraint age\_constraint check( DOB <= 60) ;

Alter table Staff (salary INT NOT NULL ) ADD CONSTRAINT SALARY\_CONSTRAINT CHECK(salay >= 9000 AND Salary <= 30000 );

B) alter table PropertyForRent MODIFY house DEFAULT ‘house’;

alter table PropertyForRent (rooms INT NOT NULL ) add constraint room\_constraint check(rooms >= 3) ;

C) alter table PrivateOwner add constraint constraint\_attribute unique(telNo, eMail);

Q5)

a) Select p.propertyNo from PropertyforRent p, Staff s where s.staffNo = p.staffNo AND s.sex = ‘F’;

b) Select p.\* from privateOwners p, PropertyForRent pr where pr.type = ‘house’;

c) Select (s.salary + = s.salary\*0.15 as incremented\_salary) from Staff s, PropertyForRent pr where pr.staffNo = s.staffNo AND pr.city = ‘London’;

D) select TO\_CHAR(viewDate, ‘month yyyy’) from Viewing;

Select p.\* from propertyforRent p, Viewing v where p.PropertyNo = v.propertyNo AND v.viewDate = ‘May 2013’;

e) Select \* from Staff where fname = ‘D%’ OR lName = ‘%W’;