**SQL Script**

CREATE TABLE OWNER(

SSN NUMBER(14) UNIQUE NOT NULL,

Gender VARCHAR2(6) check(Gender='female' OR Gender= 'male') NOT NULL,

Owner\_ID NUMBER(10) PRIMARY KEY,

Username VARCHAR2(20) UNIQUE NOT NULL,

OWNER\_Password NUMBER(5) NOT NULL,

Email VARCHAR2(25) NOT NULL

);

CREATE TABLE Client (

CLI\_ID NUMBER(10) PRIMARY KEY,

Username VARCHAR2(50) UNIQUE NOT NULL,

SSN NUMBER(14) UNIQUE NOT NULL,

Date\_Of\_Birth DATE NOT NULL,

Client\_Password VARCHAR2(5) NOT NULL,

Gender VARCHAR2(6) NOT NULL CHECK (Gender IN ('female', 'male')),

Email VARCHAR2(25) NOT NULL,

Preferred\_Contact\_Type VARCHAR2(25)

);

CREATE TABLE Property (

Property\_ID NUMBER(10) PRIMARY KEY,

Property\_Type VARCHAR2(10) NOT NULL,

Status VARCHAR2(10) CHECK (Status IN ('rent', 'buy'))NOT NULL,

Price NUMBER(10) CHECK (Price >= 500000)NOT NULL,

Area NUMBER CHECK (Area > 0) NOT NULL,

no\_of\_bathrooms NUMBER(10) NOT NULL,

no\_of\_rooms NUMBER(10) NOT NULL,

Owner\_ID NUMBER(10) NOT NULL,

FOREIGN KEY (Owner\_ID) REFERENCES Owner(Owner\_ID)

);

CREATE TABLE Property\_Location(

Location\_ID NUMBER(10),

Country VARCHAR2(30)NOT NULL ,

City VARCHAR2(30)NOT NULL,

Postal\_Code VARCHAR2(20) NOT NULL ,

Address VARCHAR2(60) NOT NULL,

PRIMARY KEY(Location\_ID)

);

CREATE TABLE TRANSACTS(

OWNER\_ID NUMBER(10)

REFERENCES OWNER (Owner\_ID),

CLI\_ID NUMBER(10)

REFERENCES Client (CLI\_ID),

TRANSACTS\_DATE DATE NOT NULL,

Payment\_method VARCHAR2(20),

Property\_ID NUMBER(10) NOT NULL,

PRIMARY KEY (CLI\_ID,OWNER\_ID)

);

CREATE TABLE Owner\_Phone (

PhoneNo VARCHAR2(30),

Owner\_ID NUMBER(10),

PRIMARY KEY(Owner\_ID, PhoneNo),

FOREIGN KEY(Owner\_ID)

REFERENCES OWNER(Owner\_ID)

);

CREATE TABLE Preferred\_Property\_Type (

CLI\_ID NUMBER(10),

PreferredType VARCHAR2(50),

PRIMARY KEY (CLI\_ID, PreferredType),

FOREIGN KEY (CLI\_ID) REFERENCES Client(CLI\_ID)

);

CREATE TABLE CLI\_Phone (

CLI\_ID NUMBER(10),

PhoneNo VARCHAR2(30) NOT NULL,

PRIMARY KEY (CLI\_ID, PhoneNo),

FOREIGN KEY (CLI\_ID) REFERENCES Client(CLI\_ID)

);

CREATE TABLE Review(

Property\_Name VARCHAR2(50),

CLI\_ID NUMBER(10),

Review\_Comment VARCHAR2(100),

Rating NUMBER(2) CHECK(Rating BETWEEN 0 AND 10),

Review\_day NUMBER(2) CHECK(Review\_day BETWEEN 1 AND 31),

Review\_Month NUMBER(2) CHECK(Review\_Month BETWEEN 1 AND 12),

Review\_Year NUMBER(4) CHECK(Review\_Year > 2000),

Anonymous Char(30),

PRIMARY KEY(Property\_Name,CLI\_ID),

FOREIGN KEY(CLI\_ID)

REFERENCES Client(CLI\_ID)

);

CREATE TABLE Has (

Property\_ID NUMBER(10)

REFERENCES Property(Property\_ID),

Location\_ID NUMBER(10)

REFERENCES Property\_Location(Location\_ID),

PRIMARY KEY(Property\_ID,Location\_ID)

);

CREATE TABLE Transportation (

Location\_ID NUMBER(10),

Transportation VARCHAR2(10),

FOREIGN KEY(Location\_ID)

REFERENCES Property\_Location(Location\_ID),

PRIMARY KEY(Location\_ID,Transportation)

);

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INSERT INTO OWNER(Owner\_ID,Gender,SSN, Username,OWNER\_Password,Email)

VAlUES(500, 'female', 20221703024568, 'Fatma\_Ahmed',34567 ,'fatmahjkl@gmail.com' );

INSERT INTO OWNER(Owner\_ID,Gender,SSN, Username,OWNER\_Password,Email)

VAlUES(501, 'male',20231703024567 , 'Ahmed\_Ali',67543 ,'Ahmedali@gmail.com' );

INSERT INTO OWNER(Owner\_ID,Gender,SSN, Username,OWNER\_Password,Email)

VAlUES(503, 'male',20244678456789 ,'ALi\_Ahmed' ,01234 ,'Ali@gmail.com' );

INSERT INTO OWNER(Owner\_ID,Gender,SSN, Username,OWNER\_Password,Email)

VAlUES(504, 'female',20004678456789,'Mona\_Ali',09876,'Mona@gmail.com' );

INSERT INTO OWNER(Owner\_ID,Gender,SSN, Username,OWNER\_Password,Email)

VAlUES(502,'male',20244678456708 ,'Mohamed\_Gamal ',04567 ,'Mgamal@gmail.com' );

INSERT INTO Client (CLI\_ID,Username, SSN, Date\_Of\_Birth, Client\_Password, Gender, Email, Preferred\_Contact\_Type)

VALUES (2450382429, 'Jenney987', 83725713727713,'04-Jan-22', 'Jen7', 'female', 'jenney555@gmail.com', 'Email');

INSERT INTO Client (CLI\_ID,Username, SSN, Date\_Of\_Birth, Client\_Password, Gender, Email, Preferred\_Contact\_Type)

VALUES (8534211999, 'Rusul009', 37015043543118,'11-Feb-22', 'Rus9', 'female', 'rusul009@gmail.com', 'Email');

INSERT INTO Client (CLI\_ID,Username, SSN, Date\_Of\_Birth, Client\_Password, Gender, Email, Preferred\_Contact\_Type)

VALUES (8531141340, 'Noran112', 37677843543118,'12-Feb-23', '1234', 'female', 'noran332@gmail.com', 'Phone');

INSERT INTO Client (CLI\_ID,Username, SSN, Date\_Of\_Birth, Client\_Password, Gender, Email, Preferred\_Contact\_Type)

VALUES (1114211340, 'Mary71110', 37015043444119,'08-May-18', '1239', 'female', 'mary001@gmail.com', 'Email');

INSERT INTO Client (CLI\_ID,Username, SSN, Date\_Of\_Birth, Client\_Password, Gender, Email, Preferred\_Contact\_Type)

VALUES (8534211340, 'Tony', 37015000233118,'19-Jul-01', '0124', 'male', 'tony@gmail.com', 'Phone');

INSERT INTO Property (Property\_ID,Property\_Type, Status, Price, Area, no\_of\_bathrooms, no\_of\_rooms, Owner\_ID)

VALUES (1, 'Apartment', 'rent', 500000, 100, 2, 3, 504);

INSERT INTO Property (Property\_ID,Property\_Type, Status, Price, Area, no\_of\_bathrooms, no\_of\_rooms, Owner\_ID)

VALUES (2, 'House', 'buy', 600000, 150, 3, 4, 501);

INSERT INTO Property (Property\_ID,Property\_Type, Status, Price, Area, no\_of\_bathrooms, no\_of\_rooms, Owner\_ID)

VALUES (3, 'Villa', 'rent', 700000, 200, 4, 5, 502);

INSERT INTO Property (Property\_ID,Property\_Type, Status, Price, Area, no\_of\_bathrooms, no\_of\_rooms, Owner\_ID)

VALUES (4, 'Penthouse', 'buy', 800000, 250, 5, 6, 504);

INSERT INTO Property (Property\_ID,Property\_Type, Status, Price, Area, no\_of\_bathrooms, no\_of\_rooms, Owner\_ID)

VALUES (5, 'Studio', 'rent', 500000, 50, 1, 1, 503);

INSERT INTO Property\_Location (Location\_ID,Country,City,Postal\_Code,Address)

VAlUES(300 ,'Japan' ,'Tokyo', 1243565 , '3-7-1 Ginza, Chuo' );

INSERT INTO Property\_Location (Location\_ID,Country,City,Postal\_Code,Address)

VAlUES(301 ,'Egypt' ,'Cairo',12434635,'5 Hassan Sabry Street, Zamalek' );

INSERT INTO Property\_Location (Location\_ID,Country,City,Postal\_Code,Address)

VAlUES(302 ,'Germany' ,'Berlin',4556623 ,'Kurfürstendamm 231, 10719' );

INSERT INTO Property\_Location (Location\_ID,Country,City,Postal\_Code,Address)

VAlUES(303 ,'Brazil' ,'Salvador', 3455532,'Avenida Tancredo Neves' );

INSERT INTO Property\_Location (Location\_ID,Country,City,Postal\_Code,Address)

VAlUES(304 ,'Japan' ,'kyoto',4345555, '19-1 Higashiyama-ku, Gion-machi');

INSERT INTO Owner\_Phone(PhoneNo,Owner\_ID)

VAlUES( '01102345061',500 );

INSERT INTO Owner\_Phone(PhoneNo,Owner\_ID)

VAlUES( '01234567891',502 );

INSERT INTO Owner\_Phone(PhoneNo,Owner\_ID)

VAlUES( '011225678342',501 );

INSERT INTO Owner\_Phone(PhoneNo,Owner\_ID)

VAlUES('01023377895' ,503 );

INSERT INTO Owner\_Phone(PhoneNo,Owner\_ID)

VAlUES('01009899765' , 504);

INSERT INTO Preferred\_Property\_Type (CLI\_ID, Preferredtype )

VALUES (2450382429, 'House');

INSERT INTO Preferred\_Property\_Type (CLI\_ID, Preferredtype )

VALUES (8534211340, 'Apartment');

INSERT INTO Preferred\_Property\_Type (CLI\_ID, Preferredtype )

VALUES (8534211999, 'Office');

INSERT INTO Preferred\_Property\_Type (CLI\_ID, Preferredtype )

VALUES (1114211340, 'Apartment');

INSERT INTO Preferred\_Property\_Type (CLI\_ID, Preferredtype )

VALUES (8534211340, 'Retail space');

INSERT INTO TRANSACTS(OWNER\_ID,TRANSACTS\_DATE,Payment\_method,Property\_ID, CLI\_ID)

VAlUES(500 ,'02-Feb-23' ,'Cash', 3,2450382429);

INSERT INTO TRANSACTS(OWNER\_ID,TRANSACTS\_DATE,Payment\_method,Property\_ID, CLI\_ID)

VAlUES(502 ,'14-Feb-22' ,'Cash',1,8534211340 );

INSERT INTO TRANSACTS(OWNER\_ID,TRANSACTS\_DATE,Payment\_method,Property\_ID, CLI\_ID)

VAlUES(503 ,'12-Jan-20' ,'Visa',2 ,8531141340);

INSERT INTO TRANSACTS(OWNER\_ID,TRANSACTS\_DATE,Payment\_method,Property\_ID, CLI\_ID)

VAlUES(504 ,'04-MAY-21' ,'Visa',4,1114211340 );

INSERT INTO TRANSACTS(OWNER\_ID,TRANSACTS\_DATE,Payment\_method,Property\_ID, CLI\_ID)

VAlUES( 501,'04-Jan-22' ,'Cash', 5,8534211999);

INSERT INTO Transportation (Location\_ID, Transportation)

VALUES (300, 'Car');

INSERT INTO Transportation (Location\_ID, Transportation)

VALUES (301, 'Bus');

INSERT INTO Transportation (Location\_ID, Transportation)

VALUES (301, 'Train');

INSERT INTO Transportation (Location\_ID, Transportation)

VALUES (302, 'Train');

INSERT INTO Transportation (Location\_ID, Transportation)

VALUES (304, 'Train');

INSERT INTO Transportation (Location\_ID, Transportation)

VALUES (303, 'Plane');

INSERT INTO Transportation (Location\_ID, Transportation)

VALUES (304, 'Bike');

INSERT INTO Review (Property\_Name,CLI\_ID,Review\_Comment,Rating,Review\_day,Review\_Month,Review\_Year,Anonymous)

VAlUES('Serene Haven Cottage', 2450382429, 'Wonderful place to relax!', 5, 5, 12, 2022,’no’);

INSERT INTO Review (Property\_Name,CLI\_ID,Review\_Comment,Rating,Review\_day,Review\_Month,Review\_Year,Anonymous)

VAlUES('Maplewood Manor', 8534211340, 'Great place with lovely surroundings.', 4, 12, 9, 2023,’no’);

INSERT INTO Review (Property\_Name,CLI\_ID,Review\_Comment,Rating,Review\_day,Review\_Month,Review\_Year,Anonymous)

VAlUES('Lakeside Retreat Apartments', 8534211340, 'Excellent amenities and friendly staff.', 5, 25, 8, 2020,’yes’);

INSERT INTO Review (Property\_Name,CLI\_ID,Review\_Comment,Rating,Review\_day,Review\_Month,Review\_Year,Anonymous)

VAlUES('Summit Plaza Tower', 1114211340, 'Convenient location for business meetings.', 4, 8, 9, 2020,’yes’);

INSERT INTO Review (Property\_Name,CLI\_ID,Review\_Comment,Rating,Review\_day,Review\_Month,Review\_Year,Anonymous)

VAlUES('Seaside Paradise Villa', 8531141340, 'Breathtaking views and peaceful atmosphere.', 5, 17, 8, 2022,’yes’);

INSERT INTO Has (Property\_ID, Location\_ID)VALUES (1, 301);

INSERT INTO Has (Property\_ID, Location\_ID)VALUES (2,302);

INSERT INTO Has (Property\_ID, Location\_ID)VALUES (3, 303);

INSERT INTO Has (Property\_ID, Location\_ID)VALUES (4,304);

INSERT INTO Has (Property\_ID, Location\_ID)VALUES (5, 300);

INSERT INTO CLI\_Phone (CLI\_ID, phoneNo) VALUES (2450382429, '01598765423');

INSERT INTO CLI\_Phone (CLI\_ID, phoneNo) VALUES (8534211999, '01592366423');

INSERT INTO CLI\_Phone (CLI\_ID, phoneNo) VALUES (8531141340, '01198765423');

INSERT INTO CLI\_Phone (CLI\_ID, phoneNo) VALUES (1114211340, '01198788823');

INSERT INTO CLI\_Phone (CLI\_ID, phoneNo) VALUES (8534211340, '01098761233');