**Table Definition**

CREATE TABLE Potential\_buyer

(

buyer\_id NUMBER GENERATED BY DEFAULT AS IDENTITY START WITH 5 PRIMARY KEY,

first\_name VARCHAR( 255 ) NOT NULL,

last\_name VARCHAR( 255 ) NOT NULL,

email VARCHAR( 255 ) NOT NULL,

phone VARCHAR( 50 ) NOT NULL ,

postal\_code VARCHAR2( 20 ) NOT NULL,

city VARCHAR2( 50 ) NOT NULL,

state VARCHAR2( 50 ) NOT NULL

);

CREATE TABLE seller

(

seller\_id NUMBER GENERATED BY DEFAULT AS IDENTITY START WITH 320 PRIMARY KEY,

seller\_name VARCHAR2( 255 ) NOT NULL,

status VARCHAR( 20 ) NOT NULL ,

address VARCHAR2( 255 ) NOT NULL,

postal\_code VARCHAR2( 20 ) NOT NULL

);

CREATE TABLE staff\_member

(

staff\_member\_id NUMBER GENERATED BY DEFAULT AS IDENTITY START WITH 403 PRIMARY KEY,

staff\_member\_name VARCHAR ( 255 ) NOT NULL,

email VARCHAR ( 255 ) NOT NULL,

phone VARCHAR ( 50 ) NOT NULL,

age NUMBER ( 38 ) NOT NULL,

sex VARCHAR ( 2 ) NOT NULL,

job\_title VARCHAR ( 255 ) NOT NULL,

salary NUMBER NOT NULL,

department VARCHAR ( 10 ) NOT NULL

);

CREATE TABLE sale\_property

(

property\_code NUMBER GENERATED BY DEFAULT AS IDENTITY START WITH 108 PRIMARY KEY,

area VARCHAR2( 255 ) NOT NULL,

address VARCHAR2( 255 ) NOT NULL,

property\_types VARCHAR2 ( 255 ) NOT NULL,

bedrooms NUMBER ( 10 ) NOT NULL,

bathrooms NUMBER ( 5 ) NOT NULL,

reception\_rooms NUMBER ( 3 ) NOT NULL,

garage NUMBER ( 6 ) NOT NULL,

current\_state\_of\_property VARCHAR2 ( 10 ) NOT NULL,

hold VARCHAR2 (20) NOT NULL,

price NUMBER ( 30,3 ) NOT NULL,

marketing\_date TIMESTAMP NOT NULL,

seller\_id NUMBER ( 10 ) NOT NULL,

CONSTRAINT fk\_sale\_property\_seller

FOREIGN KEY ( seller\_id )

REFERENCES seller( seller\_id )

ON DELETE CASCADE

);

CREATE TABLE viewing\_appointment

(

appointment\_no NUMBER GENERATED BY DEFAULT AS IDENTITY START WITH 350 PRIMARY KEY,

appointment\_time TIMESTAMP NOT NULL,

buyer\_id NUMBER(5) NOT NULL,

property\_code NUMBER(10) NOT NULL,

staff\_member\_id NUMBER(10) NOT NULL,

CONSTRAINT fk\_viewing\_appointment\_potential\_buyer

FOREIGN KEY ( buyer\_id )

REFERENCES potential\_buyer( buyer\_id )

ON DELETE CASCADE,

CONSTRAINT fk\_sale\_property\_property\_code

FOREIGN KEY ( property\_code )

REFERENCES sale\_property ( property\_code )

ON DELETE CASCADE,

CONSTRAINT fk\_staff\_member\_staff

FOREIGN KEY ( staff\_member\_id)

REFERENCES staff\_member ( staff\_member\_id )

ON DELETE CASCADE

);

**Insert Data**

Insert into seller(seller\_name,status,address,postal\_code)values('Taheem Iqbal','Doctor','145,stowhill,Newport','NP200TR');

Insert into seller(seller\_name,status,address,postal\_code)values('Tahsil Iqbal','Service Holder','232,commercial street,Newport','NP190BF');

Insert into seller(seller\_name,status,address,postal\_code)values('Zavid Iqbal','Doctor','23,corporation road, Newport','NP140BG');

Insert into seller(seller\_name,status,address,postal\_code)values('Morsheda Parvin','Business Women','46,chepstow road,Newport','NP340FD');

Insert into seller(seller\_name,status,address,postal\_code)values('Tanner Davis','Engineer','56,somerton road,Newport','NP780DH');

Insert into seller(seller\_name,status,address,postal\_code)values('James Williams','Pilot','87,wharf road,Newport','NP980YH');

Insert into seller(seller\_name,status,address,postal\_code)values('Braxton Taylor','Engineer','56,witham street,Newport','NP160BH');

Insert into seller(seller\_name,status,address,postal\_code)values('Edward Jones','Service Holder','90,feering street,Newport','NP790TE');

Insert into seller(seller\_name,status,address,postal\_code)values('Myla Darby','Pilot','12,coverack road,Newport','NP760FG');

Insert into seller(seller\_name,status,address,postal\_code)values('Tyler Lee','Business Man','48,morris street,Newport','NP430SM');

select \* from seller

Insert into staff\_member(staff\_member\_name,email,phone,age,sex,job\_title,salary,department)values('Tuba Chawla','tuba100@gmail.com','7936636133',45,'F','Assistant Manager',40000,'HR');

Insert into staff\_member(staff\_member\_name,email,phone,age,sex,job\_title,salary,department)values('Olivia Twist','olivia600@gmail.com','9736636133',47,'F','PA of GM',23000,'HR');

Insert into staff\_member(staff\_member\_name,email,phone,age,sex,job\_title,salary,department)values('Rebeca Peters','rebeca33@gmail.com','7936636133',52,'F','General Manager',50000,'HR');

Insert into staff\_member(staff\_member\_name,email,phone,age,sex,job\_title,salary,department)values('Tony Dayes','tony100@gmail.com','7936536133',42,'M','HR Assistant',44000,'HR');

Insert into staff\_member(staff\_member\_name,email,phone,age,sex,job\_title,salary,department)values('Tanjilur Rahman','tanjilur100@gmail.com','07934931633',43,'M','HR Manager',45000,'HR');

Insert into staff\_member(staff\_member\_name,email,phone,age,sex,job\_title,salary,department)values('Muniba Carol','muniba3600@gmail.com','5936636123',34,'F','Financial Associate',30000,'Finance');

Insert into staff\_member(staff\_member\_name,email,phone,age,sex,job\_title,salary,department)values('Kamrul Hasan','kamrul20@gmail.com','6935616233',40,'M','Financial Officer',20000,'Finance');

Insert into staff\_member(staff\_member\_name,email,phone,age,sex,job\_title,salary,department)values('Abdul Kader','kader100@gmail.com','9832656023',33,'M','Accounts Manager',33000,'Accounts');

Insert into staff\_member(staff\_member\_name,email,phone,age,sex,job\_title,salary,department)values('Jack Blake','jack880@gmail.com','793111256',32,'M','Accounts Officer',35000,'Accounts');

Insert into staff\_member(staff\_member\_name,email,phone,age,sex,job\_title,salary,department)values('Suji Carol','suji220@gmail.com','2936616623',36,'F','CEO',80000,'Finance');

select \* from staff\_member

Insert into potential\_buyer(first\_name,last\_name,email,phone,postal\_code,city,state)values('Jackson','Smith','jackson44@gmail.com','3453434232','NP200ZC','Newport','UK');

Insert into potential\_buyer(first\_name,last\_name,email,phone,postal\_code,city,state)values('Colton','Cameron','colton66@gmail.com','9786766664','NP190DZ','Newport','UK');

Insert into potential\_buyer(first\_name,last\_name,email,phone,postal\_code,city,state)values('Wesley','Brown','wesley55@gmail.com','8767665656','NP140AB','Newport','UK');

Insert into potential\_buyer(first\_name,last\_name,email,phone,postal\_code,city,state)values('James','Bose','james44@gmail.com','9887675443','NP340FD','Newport','UK');

Insert into potential\_buyer(first\_name,last\_name,email,phone,postal\_code,city,state)values('Andrew','Smith','andrew44@gmail.com','3453489677','NP520DF','Newport','UK');

Insert into potential\_buyer(first\_name,last\_name,email,phone,postal\_code,city,state)values('Jackson','Evans','evans54@gmail.com','3456434232','NP360HG','Newport','UK');

Insert into potential\_buyer(first\_name,last\_name,email,phone,postal\_code,city,state)values('Myla','Derby','myla65@gmail.com','3453436632','NP270HD','Newport','UK');

Insert into potential\_buyer(first\_name,last\_name,email,phone,postal\_code,city,state)values('Preston','Parker','preston44@gmail.com','6553434232','NP780DE','Newport','UK');

Insert into potential\_buyer(first\_name,last\_name,email,phone,postal\_code,city,state)values('Blake','Smith','blake94@gmail.com','9453434232','NP770YU','Newport','UK');

Insert into potential\_buyer(first\_name,last\_name,email,phone,postal\_code,city,state)values('Thomas','Smith','Thomas74@gmail.com','8953434232','NP980YT','Newport','UK');

select \* from potential\_buyer

Insert into sale\_property(area,address,property\_types,bedrooms,bathrooms,reception\_rooms,garage,current\_state\_of\_property,hold,price,marketing\_date,seller\_id)values('Gwent','232, corporation road,newport','detached',8,2,2,1,'sold','freehold',140000,'11-JAN-2022 12',320);

Insert into sale\_property(area,address,property\_types,bedrooms,bathrooms,reception\_rooms,garage,current\_state\_of\_property,hold,price,marketing\_date,seller\_id)values('hill area','146,stowhill road,newport','semi\_detached',4,2,2,1,'sold','freehold',150000,'11-FEB-2001 11',321);

Insert into sale\_property(area,address,property\_types,bedrooms,bathrooms,reception\_rooms,garage,current\_state\_of\_property,hold,price,marketing\_date,seller\_id)values('commercial area','235,commercial road,newport','detached',5,1,2,1,'unsold','leasehold',90000,'10-FEB-2022 12',322);

Insert into sale\_property(area,address,property\_types,bedrooms,bathrooms,reception\_rooms,garage,current\_state\_of\_property,hold,price,marketing\_date,seller\_id)values('city area','210, queensway,newport','link',3,3,1,2,'sold','freehold',200000,'05-JAN-2022 12',323);

Insert into sale\_property(area,address,property\_types,bedrooms,bathrooms,reception\_rooms,garage,current\_state\_of\_property,hold,price,marketing\_date,seller\_id)values('city area','221, chepstow road,newport','link',3,2,2,1,'sold','freehold',120000,'11-MAY-2020 10',324);

Insert into sale\_property(area,address,property\_types,bedrooms,bathrooms,reception\_rooms,garage,current\_state\_of\_property,hold,price,marketing\_date,seller\_id)values('city area','205, corporation road,newport','terrace',4,2,1,2,'sold','leasehold',144000,'11-APR-2014 12',325);

Insert into sale\_property(area,address,property\_types,bedrooms,bathrooms,reception\_rooms,garage,current\_state\_of\_property,hold,price,marketing\_date,seller\_id)values('city area','255, stowhill road,newport','semi\_detached',5,1,2,1,'sold','leasehold',130000,'11-NOV-2013 11',326);

Insert into sale\_property(area,address,property\_types,bedrooms,bathrooms,reception\_rooms,garage,current\_state\_of\_property,hold,price,marketing\_date,seller\_id)values('Gwent','11, kingsway street,newport','detached',6,4,2,2,'unsold','leasehold',150000,'11-FEB-2022 12',327);

Insert into sale\_property(area,address,property\_types,bedrooms,bathrooms,reception\_rooms,garage,current\_state\_of\_property,hold,price,marketing\_date,seller\_id)values('Gwent','13, somersot road,newport','link',3,3,1,1,'unsold','freehold',130000,'11-DEC-2011 02',328);

Insert into sale\_property(area,address,property\_types,bedrooms,bathrooms,reception\_rooms,garage,current\_state\_of\_property,hold,price,marketing\_date,seller\_id)values('city area','35, bishton street,newport','link',2,1,1,1,'sold','freehold',123000,'31-JAN-2022 03',329);

select \* from sale\_property

Insert into viewing\_appointment(appointment\_time,buyer\_id,property\_code,staff\_member\_id)values('10-OCT-2000 10',5,108,403);

Insert into viewing\_appointment(appointment\_time,buyer\_id,property\_code,staff\_member\_id)values('11-DEC-2001 08',6,109,404);

Insert into viewing\_appointment(appointment\_time,buyer\_id,property\_code,staff\_member\_id)values('10-NOV-2003 10',7,110,405);

Insert into viewing\_appointment(appointment\_time,buyer\_id,property\_code,staff\_member\_id)values('10-MAY-2002 04',8,111,406);

Insert into viewing\_appointment(appointment\_time,buyer\_id,property\_code,staff\_member\_id)values('10-JUN-2004 11',9,112,407);

Insert into viewing\_appointment(appointment\_time,buyer\_id,property\_code,staff\_member\_id)values('10-FEB-2005 12',10,113,408);

Insert into viewing\_appointment(appointment\_time,buyer\_id,property\_code,staff\_member\_id)values('10-OCT-2006 10',11,114,409);

Insert into viewing\_appointment(appointment\_time,buyer\_id,property\_code,staff\_member\_id)values('10-MAR-2007 11',12,115,410);

Insert into viewing\_appointment(appointment\_time,buyer\_id,property\_code,staff\_member\_id)values('10-APR-2008 10',13,116,411);

Insert into viewing\_appointment(appointment\_time,buyer\_id,property\_code,staff\_member\_id)values('10-MAY-2009 10',14,117,412);

**ANS**

-------QUESTION(C) 1

select \* from sale\_property where area='Gwent';

------QUESTION(C) 2

select \* from sale\_property where property\_types='semi\_detached' and current\_state\_of\_property='sold';

-----QUESTION (C) 3

select distinct property\_types, count(property\_types) as NumberSold From sale\_property where current\_state\_of\_property='sold' group by property\_types;

------QUESTION (C) 4

select \* from sale\_property where PRICE=(Select max(PRICE) from sale\_property) union select \* from sale\_property where price=(Select min(price) from sale\_property);

-----QUESTION (C) 5

select \* from sale\_property where BEDROOMS>=3 and BATHROOMS>=1 and GARAGE=1;

-------QUESTION (C) 6

select \* from sale\_property where marketing\_date BETWEEN '01-JAN-22' and '28-FEB-22';

---Question (C) 7

select \* from sale\_property where price=(select max(price) from sale\_property where current\_state\_of\_property='unsold')

or price=(select min(price) from sale\_property where current\_state\_of\_property='unsold') group by current\_state\_of\_property);

-----Question C (8)

SELECT S.Name, S.Staff\_Number,P.Property\_Code, P.Area, P.Address, P.Bedrooms,

P.Bathrooms,P.Property\_types, P.Price, P.State

FROM Viewing\_Appointment V

FULL OUTER JOIN Sale\_Property P

ON V.Property\_Code = P.Property\_Code

FULL OUTER JOIN Staff\_Member S

ON V.Staff\_Id = S.Staff\_member\_Id

WHERE S.Name ='Suji Carol'

-----Question (C) 9

SELECT Potential\_Buyer.Name Buyer\_Name,Seller.Name Seller\_Name,

Sale\_Property.Address, Staff\_Member.Name Staff\_Name,

Viewing\_Appointment.Date\_Appoint

FROM Viewing\_Appointment

FULL OUTER JOIN Sale\_Property

ON Viewing\_Appointment.Property\_Code = Sale\_Property.Property\_Code

FULL OUTER JOIN Staff\_Member

ON Viewing\_Appointment.Staff\_Id = Staff\_Member.Staff\_Id

FULL OUTER JOIN Potential\_Buyer

ON Viewing\_Appointment.Buyer\_No =Potential\_Buyer.Buyer\_No

FULL OUTER JOIN Seller

ON Sale\_Property.Seller\_Id =Seller.Seller\_Id

WHERE Viewing\_Appointment.Property\_Code = Sale\_Property.Property\_Code