Lab 10 Solution

Table Setup for Estate Agency :

Branch

Bno	Street	Area	City	Pcode	Tel_No	Fax_No
B5	22 Deer Rd	Sidcup	London	SW1 2EH	0171-8861212	0171-8861214
B7	16 Argyll St	Dyce	Aberdeen	AB2 3SU	01224-67125	01224-67111
B3	163 Main St	Partick	Glasgow	G11 9QX	0141-3392178	0141-3394439
B4	32 Manse Rd	Leigh	Bristol	BS99 1NZ	0117-9161170	0117-7761114
B2	56 Clover Dr		London	NW10 6EU	0181-9631030	0181-4537992

Staff

Sno	Fname	Lname	Address	TelNo	Position	Sex	DOB	Salary	NIN	Bno
SL21	John	White	19 Taylor St, London	0171-8445112	Manager	M	1/10/45	30000	WK442011B	B5
SG37	Ann	Beech	81 George St, Glasgow	0141-8483345	Senior Assistant	F	10/160	12000	Wl432514C	B3
SG14	David	Ford	63 Ashby St, Glasgow	0141-3392177	Deputy	M	24/3/58	18000	WL220658D	B3
SA9	Mary	Howe	2 Elm Place, Aberdeen		Assistant	F	19/2/70	9000	WM532187D	B7
SG5	Susan	Brand	5 Gt Western Rd, Glasgow	0141-3342001	Manager	F	3/6/40	24000	WK588932E	B3
SL41	Julie	Lee	28 Malvern St Kilburn	0181-5543541	Assistant	F	13/6/65	9000	WA290573K	B5

PROPERTY_FOR_RENT

Pno	Street	Area	City	Pcode	Type	Rooms	Rent	Ono	Sno	Bno
PA14	16 Hollyhead	Dee	Aberdeen	AB7 5SU	House	6	650	CO46	SA9	B7
PL94	6 Argyll St	Kilburn	London	NW2	Flat	4	400	CO87	SL41	B5
PG4	6 Lawrence St	Partick	Glasgow	G11 9QX	Flat	3	350	CO40	SG14	B3
PG36	2 Manor Rd		Glasgow	G32 4QX	Flat	3	375	CO93	SG37	B3
PG21	18 Dale Rd	Hyndland	Glasgow	G12	House	5	600	CO87	SG37	B3
PG16	5 Novar Dr	Hyndland	Glasgow	G12 9AX	Flat	4	450	CO93	SG14	B3

RENTER

Rno	Fname	Lname	Address	Tel_No	Pref_Type	Max_Rent
CR76	John	Kay	56 High St, Putney, London, SW1 4EH	0171-774-5632	Flat	425
CR56	Aline	Stewart	64 Fern Dr. Pollock, Glasgow, G42 OBL	0141-848-1825	Flat	350
CR74	Mike	Ritchie	18 Tain St, Gourock., PA1G 1YQ	01475-392178	House	750
CR62	Mary	Tregear	5 Tarbot Rd,Kidary, Aberdeen, AB9 3ST	01224-196720	Flat	600

OWNER

Ono	Fname	LName	Address	Tel_No
CO46	Joe	Keogh	2 Fergus Dr, Banchory, Aberdeen AB2 7SZ	01224-861212
CO87	Carol	Farrel	6 Achray St, Glasgow, G32 9DX	0141-357-7419
CO40	Tina	Murphy	63 Well St, Shawlands, Glasgow G42	0141-934-1728
CO93	Tony	Shaw	12 Park Pl, Hillhead, Glasgow G4 OQR	0141-225-7025

VIEWING

Rno	Pno	Date	Comment
CR56	PA14	24/5/95	Too small
CR76	PG4	20/4/95	Too remote

CR56	PG4	26/5/95	
CR62	PA14	14/5/95	No dining room
CR56	PG36	28/4/95	

Questions Answers:

Q1: Create A SELECT statement that includes the following fields

    Pno,
    Street,
    Rooms,
    Rent,
    Owner No
    Staff No

select pno, street, rooms, rent, ono, sno from property_for_rent;

Q2: Now add a condition to the above to show where property = PG4

select pno, street, rooms, rent, ono, sno from property_for_rent where pno='pg4';

Q3: Now add a condition for owner = CO46

select pno, street, rooms, rent, ono, sno from property_for_rent where pno='pg4' or ono='co46';

Q4: For properties that the rent is greater than 400

select pno from property_for_rent where rent >400;

Q5: For properties that the rent is between 355 and 470s

select pno, street, rooms, rent, ono, sno from property_for_rent where rent between 355 and 470;

Q6: Create an SQL statement that shows the property with the highest no of rooms
SELECT MIN(Rooms) FROM Property_for_rent;

select Pno from property_for_rent where Rooms = (select max(Rooms)from property_for_rent);

Q7: Create an SQL statement that shows the property with the lowest no of rooms

select Rooms from property_for_rent where Rooms = (select min(Rooms)from property_for_rent);

Q8: Create an SQL statement that shows the average employee salary

select avg (Salary) from Staff;

Q9: Create an SQL statement that shows the first record only from the Renter Table

select * from Renter limit 1;

Q10: Create an SQL statement that shows the staff who are Female and less than 40 years of age.

select * from Staff where Sex='F' and timestampdiff (Year, DOB, CURDATE()) <= 40;

Q11: Using Inner Joins - List names of all renters who have viewed a property along with any comment they have supplied.

Inner Join

```
SELECT      r.rno, fname, lname, pno, comment
FROM        renter r
INNER Join  viewing v
ON          r.rno = v.rno;
```

Q12: List each Staff No, Staff name (first and surname), tel no, branch no & street

Inner Join

```
SELECT      s.sno, concat(s.fname, ' ', s.lname) as name, b.tel_no, b.bno, b.street
FROM        staff s
INNER JOIN  branch b
ON          s.bno = b.bno;
```

Q13: Show the staff person that is responsible for property PA14

Inner Join

```
SELECT       s.sno, concat(s.fname,' ', s.lname) as name, pfr.pno
FROM         staff s
INNER JOIN   property_for_rent pfr
ON           s.sno = pfr.sno
AND           pfr.pno = 'PA14';
```

Q14: List branches and properties that are in same city along with any unmatched branches

Left Join

```
SELECT      b.bno AS bno,
            b.city AS bcity,
            p.pno AS pno,
            p.city AS pcity
FROM        branch b
LEFT JOIN   property_for_rent p
ON          b.city = p.city;
```

Q15 Display full details on all staff who work in a Glasgow branch.

```
SELECT      s.sno, s.fname, s.lname, s.position, b.city
FROM staff s, branch b
WHERE       s.bno = b.bno
AND    b.city = 'Glasgow';
```

Q16. Display full contact details and property details of all over the owners with a property for rent in Glasgow

```
SELECT      o.ono, o.fname, o.lname, o.address, o.Tel_No, p.city
FROM owner o, property_for_rent p
WHERE       o.ono = p.ono
AND    p.city = 'Glasgow';
```