In-Class SQL Practice

IMPORTANT:
If you are getting the this is incompatible with **sql_mode=only_full_group_by** error, run this piece of code in your SQL editor:

set global sql_mode='STRICT_TRANS_TABLES,NO_ZERO_IN_DATE,NO_ZERO_DATE,ERROR_FOR_DIVISION_BY_ZERO,NO_AUTO_CREATE_USER,NO_ENGINE_SUBSTITUTION';

1- Produce a List of fName, lName and address of owners who own a property in glasgow.

SELECT po.fName, po.lName, po.address
FROM PrivateOwner po, PropertyForRent pfr
WHERE po.ownerNo = pfr.ownerNo AND city='Glasgow';

OR

SELECT po.fName, po.lName, po.address
FROM PrivateOwner po INNER JOIN PropertyForRent pfr
ON po.ownerNo = pfr.ownerNo
WHERE city='Glasgow';

2- Produce a list of total rooms for properties for rent by each city.

SELECT SUM(rooms)
FROM PropertyForRent
GROUP BY city;

3- Produce a list fName, lName of the highest earning staff of each branch.

 SELECT fName, lName, branchNo, salary
FROM Staff s
WHERE salary = (SELECT MAX(salary) FROM Staff WHERE branchNo = s.branchNo)
GROUP BY branchNo

OR

SELECT fName, lName, branchNo, MAX(salary)
FROM Staff s

GROUP BY branchNo

4- Get the number of Flats in Glasgow.

SELECT COUNT(propertyNo)
FROM PropertyForRent
WHERE propertyType='Flat'AND city='Glasgow';

5- Produce a list of properties that are handled by a staff that works at branch B003.

SELECT *
FROM PropertyForRent
WHERE staffNo IN (SELECT staffNo
        FROM Staff
        WHERE branchNo = 'B003');

 6- Find the branch that pays the highest total salary.

SELECT MAX(ts.Total), ts.branchNo
FROM
(SELECT SUM(salary) as Total, s.branchNo
FROM staff s JOIN branch b ON s.branchNo = b.branchNo
GROUP BY b.branchNo) AS ts

7- Fetch the list of all properties that Mike Ritchie is interested in.

SELECT propertyNo, street, city, propertyType, rent
FROM PropertyForRent pfr, Client c
WHERE pfr.rent < c.maxRent AND pfr.propertyType = c.prefType AND c.fName = 'Mike' AND c.lName = 'Ritchie';

8- Produce a list of number of staff for branches in each city.

SELECT COUNT(staffNo), city
FROM Staff s INNER JOIN Branch b ON s.branchNo = b.branchNo
GROUP BY city;

9- What is the number of female staff members who work at a branch in London?

SELECT staffNo, COUNT(staffNo)
FROM Branch b JOIN Staff s ON b.branchNo = s.branchNo
WHERE b.city = 'London' AND s.sex = 'F';

10- Find the number of staff that showed a property to Aline Stewart.
SELECT COUNT(staffNo)
FROM Viewing v INNER JOIN Client c ON v.clientNo = c.clientNo
INNER JOIN PropertyForRent pfr ON pfr.propertyNo = v.propertyNo
WHERE c.fName = 'Aline' AND c.lName = 'Stewart';

11- Find the names of staff who showed a property to Aline Stewart
SELECT s.fName, s.lName
FROM Viewing v INNER JOIN Client c ON v.clientNo = c.clientNo
INNER JOIN PropertyForRent pfr ON pfr.propertyNo = v.propertyNo
INNER JOIN Staff s ON s.staffNo = pfr.staffNo
WHERE c.fName = 'Aline' AND c.lName = 'Stewart';