

Consider Home Rental database with the following schemas:

Branch(branchNo, street, city, postcode)

Staff(staffNo, fName, lName, position, sex, DOB, salary, branchNo)

PropertyForRent(propertyNo, street, city, postcode, type, rooms, rent, ownerNo, staffNo, branchNo)

Client(clientNo, fName, lName, telNo, prefType, maxRent)

PrivateOwner(ownerNo, fName, lName, address, telNo)

Viewing(clientNo, propertyNo, viewDate, comment)

Registration(clientNo, branchNo, staffNo, dateJoined)

1. Create a database HomeRental ensuring the following:

Sex can only be specified as 'M' or 'F', Branch number (branchNo) in other tables must be branch number of an existing branch and same rules are applied to ownerNo, staffNo and clientNo

2. Populate the database with the following data.

Branch

branchNo	street	city	postcode
B005	22 Deer Rd	London	SW1 4EH
B007	16 Argyll St	Aberdeen	AB2 3SU
B003	163 Main St	Glasgow	G11 9QX
B004	32 Manse Rd	Bristol	BS99 1NZ
B002	56 Clover Dr	London	NW10 6EU

Staff

staffNo	fName	lName	position	sex	DOB	salary	branchNo
SL21	John	White	Manager	M	1-Oct-45	30000	B005
SG37	Ann	Beech	Assistant	F	10-Nov-60	12000	B003
SG14	David	Ford	Supervisor	M	24-Mar-58	18000	B003
SA9	Mary	Howe	Assistant	F	19-Feb-70	9000	B007
SG5	Susan	Brand	Manager	F	3-Jun-40	24000	B003
SL41	Julie	Lee	Assistant	F	13-Jun-65	9000	B005

Registration

clientNo	branchNo	staffNo	dateJoined
CR76	B005	SL41	2-Jan-04
CR56	B003	SG37	11-Apr-03
CR74	B003	SG37	16-Nov-02
CR62	B007	SA9	7-Mar-03

PropertyForRent

propertyNo	street	city	postcode	type	rooms	rent	ownerNo	staffNo	branchNo
PA14	16 Holhead	Aberdeen	AB7 5SU	House	6	650	CO46	SA9	B007
PL94	6 Argyll St	London	NW2	Flat	4	400	CO87	SL41	B005
PG4	6 Lawrence St	Glasgow	G11 9QX	Flat	3	350	CO40		B003
PG36	2 Manor Rd	Glasgow	G32 4QX	Flat	3	375	CO93	SG37	B003
PG21	18 Dale Rd	Glasgow	G12	House	5	600	CO87	SG37	B003
PG16	5 Novar Dr	Glasgow	G12 9AX	Flat	4	450	CO93	SG14	B003

Client

clientNo	fName	lName	telNo	prefType	maxRent
CR76	John	Kay	0207-774-5632	Flat	425
CR56	Aline	Stewart	0141-848-1825	Flat	350
CR74	Mike	Ritchie	01475-392178	House	750
CR62	Mary	Tregear	01224-196720	Flat	600

PrivateOwner

ownerNo	fName	lName	address	telNo
CO46	Joe	Keogh	2 Fergus Dr, Aberdeen AB2 7SX	01224-861212
CO87	Carol	Farrel	6 Achray St, Glasgow G32 9DX	0141-357-7419
CO40	Tina	Murphy	63 Well St, Glasgow G42	0141-943-1728
CO93	Tony	Shaw	12 Park Pl, Glasgow G4 0QR	0141-225-7025

Viewing

clientNo	propertyNo	viewDate	comment
CR56	PA14	24-May-04	too small
CR76	PG4	20-Apr-04	too remote
CR56	PG4	26-May-04	
CR62	PA14	14-May-04	no dining room
CR56	PG36	28-Apr-04	

3. Write SQL queries:

- i. List full details of all staff.
- ii. Produce a list of salaries for all staff, showing only the staff number, the first and last names, and the salary details.
- iii. Produce a list of monthly salaries for all staff, showing the staff number, the first and last names, and the salary details.
- iv. List all staff with a salary greater than £10,000.
- v. List all staff with a salary between £20,000 and £30,000.
- vi. Produce a list of salaries for all staff, showing only the staffNo, fName, lName, and salary details.
- vii. List all managers and supervisors.
- viii. List all cities where there is either a branch office or a property for rent.
- ix. List all cities where there is a branch office but no properties for rent.
- x. List all cities where there is both a branch office and at least one property for rent.
- xi. List the names and comments of all clients who have viewed a property for rent.
- xii. Produce a status report on property viewings.
- xiii. List complete details of all staff who work at the branch in Glasgow.
- xiv. Find all owners with the string 'Glasgow' in their address.
- xv. How many properties cost more than £350 per month to rent?
- xvi. Find the minimum, maximum, and average staff salary.
- xvii. Find the number of staff working in each branch and the sum of their salaries.
- xviii. List the details of all viewings on property PG4 where a comment has not been supplied.
- xix. Produce a list of salaries for all staff, arranged in descending order of salary.
- xx. Produce a list of properties arranged in order of property type.
- xxi. How many different properties were viewed in May 2004?
- xxii. Find the total number of Managers and the sum of their salaries.
- xxiii. For each branch office with more than one member of staff, find the number of staff working in each branch and the sum of their salaries.
- xxiv. List the staff who work in the branch at '163 Main St'.
- xxv. List all staff whose salary is greater than the average salary, and show by how much their salary is greater than the average.
- xxvi. List the properties that are handled by staff who work in the branch at '163 Main St'.
- xxvii. Find all staff whose salary is larger than the salary of at least one member of staff at branch B003.
- xxviii. Find all staff whose salary is larger than the salary of every member of staff at branch B003.
- xxix. List the names of all clients who have viewed a property along with any comment supplied.
- xxx. For each branch office, list the numbers and names of staff who manage properties and the properties that they manage.
- xxxi. For each branch, list the numbers and names of staff who manage properties, including the city in which the branch is located and the properties that the staff manage.
- xxxii. Find the number of properties handled by each staff member.
- xxxiii. List all branch offices and any properties that are in the same city.
- xxxiv. List the branch offices and properties that are in the same city along with any unmatched branches or properties.
- xxxv. Write query to create a table `OwnersPropertyCount (ownerNo, fName, lName, noOfProperty)` and populate from the existing tables.
- xxxvi. Give all staff a 3% pay increase.
- xxxvii. Give all Managers a 5% pay increase.
- xxxviii. Promote David Ford (staffNo = 'SG14') to Manager and change his salary to £18,000.
- xxxix. Delete all viewings that relate to property PG4.
- xl. Delete all rows from the Viewing table.