

Tutorial / Practical 04 – SQL DML Part 1

Learning Outcomes

- Use DML statements (SELECT, WHERE, ORDER BY) to retrieve data from database tables
- Use DML statements (SUM, AVG, MIN, MAX) to summarize data from database tables
- Use DML statements (INSERT, UPDATE, DELETE) to modify data from database tables

Here, you will use the tables you created in the last practical session (Practical 03)

1. Write and execute SQL DML statements to insert the following records in the Dreamhome database. **Note** the order of the columns in the PropertyForRent table below does not match that of your table.

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

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

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

- Write and execute SQL DML statements to insert the records in Viewing.dat and Registration.dat files (available from Google classroom) into the Viewing and Registration table, respectively.

You may find the following SQL code snippet useful:

```
BULK INSERT Viewing
FROM 'C:\...\Viewing.dat'
WITH ( FORMAT = 'CSV');
```

For more details, refer to

<https://learn.microsoft.com/en-us/sql/t-sql/statements/bulk-insert-transact-sql?view=sql-server-ver16>

- Write and execute SELECT statement for each of the following queries:
 - List full details of all branch offices.
 - List the propertyNo of all properties together with their address.
 - List the cities in which there is a branch office.
 - List the cities in which there is a property available for rent.
 - List the propertyNo and address of all properties together with their annual rent.
 - List full details of branch offices located in London.
 - List the propertyNo and address all properties with more than 3 rooms.
 - List the propertyNo and address of all houses.
 - List the propertyNo and address all flats with 3-4 rooms and rent no more than £400.
 - List full details of branch offices located in London, Glasgow and Bristol.
 - List full details of all branch offices except those located in London.
 - List the propertyNo and address of all properties having their postcode starting with G12.
 - List the propertyNo and address of all properties not yet assigned to a staff member.
 - List the names and address of all owners living in Glasgow, alphabetically ordered by IName.
 - List the propertyNo, address and rent of all houses with rent below £400.00 ordered by price.
 - List the details of staff ordered by their branchNo. Records of staff with same branchNo

should be ordered by staffNo.

17. How many branch offices are there?
18. How many managers are there?
19. How many clients are looking for flats?
20. How many houses are available for rent?
21. What is the average rent of a property?
22. What is the max rent for a flat with 3 rooms?
23. In how many cities does Dreamhome have a branch office?
24. How many properties have been viewed?