

1) Find the addresses of all houses currently listed.

```
MariaDB [(none)]> use realestatedb;
Database changed
MariaDB [realestatedb]> SELECT P.address
  -> FROM Property P
  -> JOIN House H ON P.address = H.address
  -> JOIN Listings L ON P.address = L.address;
+-----+
| address |
+-----+
| 123 Elm St |
| 202 Birch Blvd |
| 321 Pine Ct |
| 456 Oak St |
| 789 Maple Ave |
+-----+
5 rows in set (0.001 sec)

MariaDB [realestatedb]>
```

2) Find the addresses and MLS numbers of all houses currently listed.

```
MariaDB [realestatedb]> SELECT P.address, L.mlsNumber
  -> FROM Property P
  -> JOIN House H ON P.address = H.address
  -> JOIN Listings L ON P.address = L.address;
+-----+-----+
| address | mlsNumber |
+-----+-----+
| 123 Elm St | 1 |
| 202 Birch Blvd | 3 |
| 321 Pine Ct | 5 |
| 456 Oak St | 2 |
| 789 Maple Ave | 4 |
+-----+-----+
5 rows in set (0.001 sec)

MariaDB [realestatedb]>
```

3) Find the addresses of all 3-bedroom, 2-bathroom houses currently listed.

```
MariaDB [realestatedb]> SELECT P.address
-> FROM Property P
-> JOIN House H ON P.address = H.address
-> JOIN Listings L ON P.address = L.address
-> WHERE H.bedrooms = 3 AND H.bathrooms = 2;
+-----+
| address |
+-----+
| 123 Elm St |
| 789 Maple Ave |
+-----+
2 rows in set (0.000 sec)

MariaDB [realestatedb]> _
```

4) Find the addresses and prices of all 3-bedroom, 2-bathroom houses with prices in the range \$100,000 to \$250,000, with the results shown in descending order of price.

```
MariaDB [realestatedb]> SELECT P.address, P.price
-> FROM Property P
-> JOIN House H ON P.address = H.address
-> WHERE H.bedrooms = 3 AND H.bathrooms = 2 AND P.price BETWEEN 100000 AND 250000
-> ORDER BY P.price DESC;
+-----+-----+
| address | price |
+-----+-----+
| 789 Maple Ave | 250000 |
| 123 Elm St | 200000 |
+-----+-----+
2 rows in set (0.001 sec)

MariaDB [realestatedb]>
```

5) Find the addresses and prices of all business properties that are advertised as office space in descending order of price.

```
MariaDB [realestatedb]> SELECT P.address, P.price
-> FROM Property P
-> JOIN BusinessProperty BP ON P.address = BP.address
-> WHERE BP.type = 'Office'
-> ORDER BY P.price DESC;
+-----+-----+
| address | price |
+-----+-----+
| 789 Pine St | 400000 |
+-----+-----+
1 row in set (0.001 sec)

MariaDB [realestatedb]>
```

6) Find all the ids, names, and phones of all agents, together with the names of their firms and the dates when they started.

```

MariaDB [realestatedb]> SELECT A.agentId, A.name AS agent_name, A.phone, F.name AS firm_name, A.dateStarted
-> FROM Agent A
-> JOIN Firm F ON A.firmId = F.id;
+-----+-----+-----+-----+-----+
| agentId | agent_name | phone | firm_name | dateStarted |
+-----+-----+-----+-----+-----+
| 1 | John Doe | 123-456-7890 | Sunset Realty | 2020-01-01 |
| 2 | Jane Smith | 987-654-3210 | Oceanview Properties | 2021-02-15 |
| 3 | Lucas Scott | 555-123-4567 | Dream Realty | 2018-07-20 |
| 4 | Mia Green | 555-987-6543 | Premium Properties | 2020-08-15 |
| 5 | Ethan Black | 555-444-5555 | Urban Estates | 2021-05-12 |
+-----+-----+-----+-----+-----+
5 rows in set (0.001 sec)

MariaDB [realestatedb]> _

```

7) Find all the properties currently listed by an agent with id "001" (or some other suitable id).

```

MariaDB [realestatedb]> SELECT P.address, P.price
-> FROM Property P
-> JOIN Listings L ON P.address = L.address
-> WHERE L.agentId = 3;
+-----+-----+
| address | price |
+-----+-----+
| 202 Birch Blvd | 600000 |
| 654 Oak Dr | 450000 |
+-----+-----+
2 rows in set (0.001 sec)

MariaDB [realestatedb]> _

```

8) Find all Agent.name-Buyer.name pairs where the buyer works with the agent, sorted alphabetically by Agent.name.

```

MariaDB [realestatedb]> SELECT A.name AS agent_name, B.name AS buyer_name
-> FROM Works_With WW
-> JOIN Agent A ON WW.agentId = A.agentId
-> JOIN Buyer B ON WW.buyerId = B.id
-> ORDER BY A.name;
+-----+-----+
| agent_name | buyer_name |
+-----+-----+
| Ethan Black | Olivia Harris |
| Jane Smith | Emily Blunt |
| John Doe | Chris Evans |
| Lucas Scott | Rachel Adams |
| Mia Green | David Nelson |
+-----+-----+
5 rows in set (0.001 sec)

MariaDB [realestatedb]> _

```

9) For each agent, find the total number of buyers currently working with that agent (Agent.id-count pairs).

```

MariaDB [realestatedb]> SELECT A.agentId, COUNT(WW.buyerId) AS buyer_count
-> FROM Agent A
-> LEFT JOIN Works_With WW ON A.agentId = WW.agentId
-> GROUP BY A.agentId;
+-----+-----+
| agentId | buyer_count |
+-----+-----+
|      1 |           1 |
|      2 |           1 |
|      3 |           1 |
|      4 |           1 |
|      5 |           1 |
+-----+-----+
5 rows in set (0.001 sec)

MariaDB [realestatedb]>

```

10) For a buyer (e.g., identified by id "001"), find all houses that meet the buyer's preferences, with the results shown in descending order of price.

```

MariaDB [realestatedb]> SELECT P.address, P.price
-> FROM Property P
-> JOIN House H ON P.address = H.address
-> JOIN Buyer B ON B.id = 3
-> WHERE B.propertyType = 'House'
-> AND H.bedrooms = B.bedrooms
-> AND H.bathrooms = B.bathrooms
-> AND P.price BETWEEN B.minimumPreferredPrice AND B.maximumPreferredPrice
-> ORDER BY P.price DESC;
+-----+-----+
| address | price |
+-----+-----+
| 321 Pine Ct | 350000 |
+-----+-----+
1 row in set (0.001 sec)

MariaDB [realestatedb]>

```