

```
CREATE DATABASE VentasCasas;
USE VentasCasas;
```

```
CREATE TABLE Tipo-Casa (
  tipo_id INT AUTO-INCREMENT PRIMARY KEY,
  nombre VARCHAR(100)
);
```

```
CREATE TABLE Casa (
  casa_id INT AUTO-INCREMENT PRIMARY KEY,
  direccion VARCHAR(100),
  precio DECIMAL(12,2),
  tipo_id INT,
  FOREIGN KEY (tipo_id) REFERENCES Tipo-Casa (tipo_id)
);
```

```
CREATE TABLE Cliente (
  cliente_id INT AUTO-INCREMENT PRIMARY KEY,
  nombre VARCHAR(100),
  email VARCHAR(100),
  telefono VARCHAR(20)
);
```

```
CREATE TABLE Agente (
  agente_id INT AUTO-INCREMENT PRIMARY KEY,
  nombre VARCHAR(100),
  experiencia INT
);
```

```
CREATE TABLE Caracteristica (
  caracteristica_id INT AUTO-INCREMENT PRIMARY KEY,
  nombre VARCHAR(100)
);
```

```
CREATE TABLE Casa-Caracteristica (
  casa_id INT,
  caracteristica_id INT,
  PRIMARY KEY (casa_id, caracteristica_id),
  FOREIGN KEY (casa_id) REFERENCES Casa (casa_id),
  FOREIGN KEY (caracteristica_id) REFERENCES Caracteristica (caracteristica_id)
);
```

```
CREATE TABLE Agente-Casa (
  agente_id INT,
  casa_id INT,
  PRIMARY KEY (agente_id, casa_id),
  FOREIGN KEY (agente_id) REFERENCES Agente (agente_id),
  FOREIGN KEY (casa_id) REFERENCES Casa (casa_id)
);
```

FOREIGN KEY (casa_id) REFERENCES Casa (casa_id)
);

ALTER TABLE Cliente ADD direccion VARCHAR(100);

INSERT INTO Tipo_Casa (nombre) VALUES
('Apartamento'), ('Casa'), ('Penthouse');

INSERT INTO Casa (direccion, precio, tipo_id) VALUES
('Calle 100 #20-30', 250000000, 1),
('Carrera 15 #45-30', 380000000, 2),
('Av 9 #10-99', 60000000, 3);

INSERT INTO Cliente (nombre, email, telefono, direccion)
VALUES

('Sebastián Muñoz', 'sebastian@mail.com', '3001234567', 'Calle 10 #1-11'),
('Valeria Cruz', 'valeria@mail.com', '3012345678', 'Cra 25 #12-34'),
('Julian Torres', 'julian@mail.com', '3023456789', 'Av 30 #64-89');

INSERT INTO Agente (nombre, experiencia) VALUES
('Carolina Pérez', 5),
('Miguel Rojas', 8),
('Laura Vélez', 3);

INSERT INTO Caracteristica (nombre) VALUES
('3 habitaciones'), ('Paseadero'), ('Piscina');

INSERT INTO Casa_Caracteristicas (casa_id, caracteristica_id)
VALUES (1, 1), (2, 2), (3, 3);

INSERT INTO Agente_Casa (agente_id, casa_id) VALUES
(1, 1), (2, 2), (3, 3);

UPDATE Tipo_Casa SET nombre = 'Apartamento familiar'
WHERE tipo_id = 1;

UPDATE Casa SET precio = 265000000 WHERE casa_id = 1;

UPDATE Cliente SET nombre = 'Sebastián A Muñoz' WHERE
cliente_id = 1;

UPDATE Agente SET experiencia = 6 WHERE agente_id = 1;

UPDATE Caracteristica SET nombre = '3 habitaciones y 2
baños' WHERE caracteristica_id = 1;

DELETE FROM Casa_Caracteristica WHERE casa_id = 1 AND
caracteristica_id = 1;


```
DELETE FROM Agente_Casa WHERE agente_id = 1 AND casa_id = 1;
```

```
DELETE FROM Casa WHERE casa_id = 1;
```

```
DELETE FROM Cliente WHERE cliente_id = 1;
```

```
DELETE FROM Caracteristica WHERE caracteristica_id = 1;
```

```
SELECT casa.direccion, Tipo_casa.nombre AS tipo  
FROM Casa
```

```
JOIN Tipo_Casa ON Casa.tipo_id = Tipo_casa.tipo_id;
```

```
SELECT Casa.direccion, Caracteristica.nombre AS  
Caracteristica
```

```
FROM Casa, Caracteristica
```

```
JOIN Casa ON Casa.Caracteristica.casa_id = Casa.casa_id
```

```
JOIN Caracteristica ON Casa.Caracteristica.caracteristica_id =  
caracteristica.caracteristica_id;
```

```
SELECT Casa.direccion, Agente.nombre AS agente  
FROM Agente_Casa
```

```
JOIN Casa ON Agente_Casa.casa_id = Casa.casa_id
```

```
JOIN Agente ON Agente_Casa.agente_id = Agente.agente_id;
```

```
SELECT Tipo_Casa.nombre, COUNT(*) AS total_casas
```

```
FROM Tipo_Casa
```

```
JOIN Casa ON Tipo_casa.tipo_id = Casa.tipo_id
```

```
GROUP BY Tipo_casa.tipo_id;
```

```
SELECT Agente.nombre, COUNT(*) AS total_casas
```

```
FROM Agente
```

```
JOIN Agente_Casa ON Agente.agente_id = Agente_Casa.agente_id
```

```
GROUP BY Agente.agente_id;
```

```
SELECT nombre FROM Cliente
```

```
WHERE cliente_id IN (
```

```
SELECT cliente_id FROM Cliente WHERE nombre LIKE 'Valerio%');
```

```
SELECT nombre FROM Caracteristica
```

```
WHERE caracteristica_id IN (
```

```
SELECT caracteristica_id FROM Casa.Caracteristica  
WHERE casa_id = 2
```

```
);
```

```
SELECT nombre FROM Agente  
WHERE agente_id IN (  
  SELECT agente_id FROM Agente-Casa WHERE casa_id = 2  
);
```

```
SELECT nombre FROM Tipo-Casa  
WHERE tipo_id = (  
  SELECT tipo_id FROM Casa WHERE direccion =  
  'Carrera 15#45-30'  
);
```

```
SELECT direccion FROM Casa  
WHERE precio = (  
  SELECT MAX(precio) FROM Casa  
);
```

```
SELECT COUNT(*) AS total-casas FROM Casa;  
SELECT COUNT(*) AS total-clientes FROM clientes;  
SELECT COUNT(*) AS total-agentes FROM Agente;  
SELECT COUNT(*) AS total-caracteristicas FROM Caracteristicas;  
SELECT COUNT(*) AS total-casa-caracteristica FROM  
Casa-caracteristica;  
SELECT COUNT(*) AS total-agente-casa FROM Agente-Casa;  
SELECT SUM(precio) AS suma-precios FROM Casa;  
SELECT AVG(precio) AS promedio-precio FROM Casa;  
SELECT MAX(precio) AS casa-max-cara FROM Casa;  
SELECT LENGTH(direccion) AS longitud-direccion FROM Casa  
LIMIT 1;
```

DELIMITER ##

```
CREATE PROCEDURE RegistrarCasa(  
  IN p-direccion VARCHAR(100),  
  IN p-precio DECIMAL(12,2),  
  IN p-tipo-id INT  
)
```

BEGIN

```
INSERT INTO Casa(direccion, precio, tipo-id)  
VALUES (p-direccion, p-precio, p-tipo-id);
```

END ##

DELIMITER;