

```
CREATE DATABASE myHomes;
```

```
USE myHomes;
```

```
CREATE TABLE property(  
    prop_id int PRIMARY KEY,  
    price int,  
    no_beds smallint,  
    rep_id int,  
    year_built smallint,  
    location_id int NOT NULL,  
    no_floors smallint,  
    type_id smallint,  
    health_regs bool NOT NULL  
);
```

```
CREATE TABLE property_type(  
    type_id smallint PRIMARY KEY,  
    type_name varchar(20) NOT NULL UNIQUE  
);
```

```
CREATE TABLE location(  
    location_id int PRIMARY KEY,  
    street_number varchar(5) NOT NULL,  
    street_name varchar(30) NOT NULL,  
    chief_id int  
);
```

```
CREATE TABLE salesrep(  
    rep_id int PRIMARY KEY,  
    rep_name varchar(30) NOT NULL,  
    location_id int,  
    sup_id int,  
    sales_target int  
);
```

```
CREATE TABLE customer(  
    cust_id int PRIMARY KEY,  
    name varchar(30) NOT NULL UNIQUE,  
    phonenumber varchar(20) NOT NULL UNIQUE,  
    email varchar(255) NOT NULL UNIQUE,  
    location_id int,  
    rep_id int  
);
```

```
ALTER TABLE customer ADD CONSTRAINT fk_custrep_id FOREIGN KEY(rep_id) REFERENCES  
salesrep(rep_id) ON DELETE SET NULL;
```

```
ALTER TABLE customer ADD CONSTRAINT fk_custloc_id FOREIGN KEY(location_id) REFERENCES  
location(location_id) ON DELETE SET NULL;
```

```
ALTER TABLE customer ADD CONSTRAINT chk_email CHECK (email LIKE '%@%');
```

```
ALTER TABLE location ADD CONSTRAINT fk_chief_id FOREIGN KEY(chief_id) REFERENCES  
salesrep(rep_id) ON DELETE SET NULL;
```

```
ALTER TABLE property ADD CONSTRAINT fk_proprep_id FOREIGN KEY(rep_id) REFERENCES  
salesrep(rep_id) ON DELETE SET NULL;
```

```
ALTER TABLE property ADD CONSTRAINT fk_proploc_id FOREIGN KEY(location_id) REFERENCES  
location(location_id) ON DELETE CASCADE;
```

```
ALTER TABLE property ADD CONSTRAINT chk_bungalow_floors CHECK ((type_id = 02 AND  
no_floors = 1) OR (type_id != 02));
```

```
ALTER TABLE property ADD CONSTRAINT chk_land_floors CHECK ((type_id = 01 AND no_floors  
= 0) OR (type_id != 01));
```

```
ALTER TABLE property ADD CONSTRAINT fk_prop_type_id FOREIGN KEY(type_id) REFERENCES  
property_type(type_id) ON DELETE CASCADE;
```

```
ALTER TABLE salesrep ADD CONSTRAINT fk_repsup_id FOREIGN KEY(sup_id) REFERENCES  
salesrep(rep_id) ON DELETE SET NULL;
```

```
ALTER TABLE salesrep ADD CONSTRAINT fk_reploc_id FOREIGN KEY(location_id) REFERENCES  
location(location_id) ON DELETE SET NULL;
```

```
SET FOREIGN_KEY_CHECKS = 0;
```

```
INSERT INTO customer VALUES
```

```
(391927, 'bob', 0750546562, 'efsrn@gmail.com', 28033, 4761),  
(965335, 'dave', 0763450387, 'zcbwym@gmail.com', 53185, 4735),  
(634799, 'sarah', 077858917, 'dyzeoe@gmail.com', 33601, 2563),  
(189215, 'liz', 076394938, 'jwhmal@gmail.com', 43665, 1930),  
(301567, 'bean', 076936864, 'qhjrkJ@gmail.com', 22193, 2084),  
(377303, 'gio', 077875681, 'dhrfpz@gmail.com', 44201, 4014)
```

```
;
```

```
INSERT INTO property VALUES
```

```
(860159, 763286, 0, 1930, 1980, 28033, 0, 01, TRUE),  
(780687, 576673, 3, 2084, 2005, 22193, 1, 02, FALSE),  
(994639, 710299, 5, 2084, 1999, 22193, 1, 02, TRUE),  
(520311, 198962, 3, 2451, 1998, 43665, 4, 03, TRUE),  
(319527, 688564, 5, 4152, 2005, 12345, 1, 02, TRUE),  
(169391, 702865, 0, 7192, 2021, 44201, 10, 04, FALSE),  
(16759, 233419, 6, 9219, 2010, 43665, 6, 05, TRUE),  
(606687, 961607, 1, 4152, 2018, 53185, 4, 03, TRUE),
```

```

(206607, 964194, 2, 2563, 2006, 53185, 1, 02, FALSE),
(490751, 348829, 1, 1930, 2001, 33601, 0, 03, FALSE),
(300000, 233688, 3, 7472, 2006, 19823, 2, 03, TRUE),
(400000, 198763, 4, 4761, 2009, 12345, 3, 03, TRUE)
;

```

INSERT INTO property_type VALUES

```

(01, 'Land'),
(02, 'Bungalow'),
(03, 'House'),
(04, 'Commercial'),
(05, 'Flat')
;

```

INSERT INTO salesrep VALUES

```

(4761, 'tilly', 28033, 9219, 18000),
(4735, 'sam', 28033, null, 34000),
(2563, 'david', 43665, null, 30000),
(1930, 'pyth', 44201, null, 26000),
(2084, 'cameron', 44201, null, 15000),
(4014, 'prim', 22193, 9219, 45000),
(7192, 'mai', 53185, 9219, 45000),
(2451, 'sukh', 44201, 4152, 22000),
(9689, 'sadie', 33601, null, 53000),
(7472, 'ari', 43665, null, 52000),
(9219, 'shirin', 12345, null, 80000),
(4152, 'alexa', 45678, null, 70000)
;

```

INSERT INTO location VALUES

```

(28033, 1, 'MEDITATION LANE', 2084),
(12345, 2, 'SILVER CANOE WAY', 4014),
(43665, 3, 'GENTLE RAIN DRIVE', 9219),
(45678, 4, 'LOCH NESS ROAD', 4761),
(19823, 4, 'GRANDIOSE DRIVE', 4761),
(44201, 5, 'MELODY DRIVE', 4014),
(22193, 6, 'MISTLETOE LANE', 2451),
(43660, 7, 'GOLDEN TROUT WAY', 1930),
(53185, 8, 'CHARDONNAY DRIVE', 4152),
(33601, 7, 'DIXIE AVENUE', 2084)
;

```

SET FOREIGN_KEY_CHECKS = 1;

```

SELECT sr.rep_id, sr.rep_name, sr.sup_id, spv.rep_name AS supervisor_name, p.* FROM
salesrep sr LEFT JOIN salesrep spv ON sr.sup_id = spv.rep_id LEFT JOIN property p ON
sr.rep_id = p.rep_id ORDER BY rep_name ASC;

```

```
SELECT c.cust_id, c.name AS customer_name, c.phonenumber, c.email, loc.location_id,  
loc.street_number, loc.street_name, CONCAT(rep.rep_name, ' (Rep ID:', loc.chief_id,  
' )') AS chief_name FROM customer c LEFT JOIN location loc ON c.location_id =  
loc.location_id LEFT JOIN salesrep rep ON loc.chief_id = rep.rep_id;
```