

```
/* SECTION 1 - CREATE TABLE STATEMENTS */
```

```
CREATE TABLE adgf088_Pet (  
    petID int(7) PRIMARY KEY,  
    petType varchar(255),  
    petBreed varchar(255) NULL,  
    pet_name varchar(255),  
    birthDate char(8) NULL,  
    birthYear int(4)  
);
```

```
CREATE TABLE adgf088_Family (  
    surname varchar(255),  
    f_telephone varchar(255),  
    f_address varchar(255),  
    membership char(1),  
    petID int(10),  
    PRIMARY KEY(surname,petID),  
    FOREIGN KEY(petID) REFERENCES adgf088_Pet(petID)  
);
```

```
CREATE TABLE adgf088_Vet (  
    vetID int(5) PRIMARY KEY,  
    vet_name varchar(255),  
    v_telephone varchar(255),  
    v_address varchar(255) NULL,  
    title varchar(10) NULL,  
    jobDuration int(2)  
);
```

```
CREATE TABLE adgf088_MedPrescribed (  
    medicineID int(6) PRIMARY KEY,  
    medName varchar(255),  
    manufacturerName varchar(255),  
    medType varchar(255)  
);
```

```
CREATE TABLE adgf088_Appointment (  
    appointmentID int(9) PRIMARY KEY,  
    appointDate char(8),  
    appointTime char(5),  
    description varchar(255),  
    appointDuration int(2),  
    vetID int(5),  
    petID int(7),  
    medicineID int(6),  
    FOREIGN KEY(vetID) REFERENCES adgf088_Vet(vetID),  
    FOREIGN KEY(petID) REFERENCES adgf088_Pet(petID),  
    FOREIGN KEY(medicineID) REFERENCES adgf088_MedPrescribed(medicineID)  
);
```

```
/* SECTION 2 - INSERT STATEMENTS */
```

```
INSERT INTO adgf088_Pet(petID, petType, petBreed, pet_name, birthDate,  
birthYear)  
VALUES(2947418, 'Cat', 'Himalayan', 'Mitzy', '03/09/15', 2015),
```

```
(2342638, 'Dog', 'Labrador', 'Coco', '11/04/12', 2012),
(2367313, 'Hamster', 'Syrian', 'Heidi', '24/02/22', 2022),
(2638424, 'Cat', NULL, 'Cinammon', NULL, 2016),
(2345241, 'Gecko', NULL, 'Harry', '11/03/19', 2019),
(2568429, 'Rabbit', 'Netherland Dwarf', 'Willow', NULL, 2020),
(2557391, 'Dog', 'Husky', 'Hunter', '23/11/23', 2023),
(2839475, 'Guinea pig', NULL, 'Max', '06/01/21', 2021),
(2458394, 'Dog', 'Chihuahua', 'Fifi', NULL, 2014),
(2835481, 'Hamster', 'Roborovski', 'Smartie', '18/05/23', 2023),
(2793094, 'Cat', 'Siamese', 'Rory', '10/03/17', 2017),
(2364893, 'Dog', 'Doberman', 'Rufus', '23/07/12', 2012);
```

```
INSERT INTO adgf088_Family(surname, f_telephone, f_address, membership,
petID)
```

```
VALUES('Hendrick', '07749435219', '12 Bale Drive, SM78RT', 'P', 2364893),
('Gertrude', '07358350278', '149 Hallow Street, DR62YU', 'S', 2835481),
('Finchley', '07289245864', '3 Duke Road, WE48OP', 'P', 2345241),
('White', '07349267109', '23 Camberley Court, KL81VD', 'N', 2947418),
('Vernon', '07269461051', '89 Baker Lane, SM70ES', 'N', 2367313),
('Lowe', '07297464740', '94 Cannon Street, DR29OK', 'S', 2793094),
('Ayuk', '07846194153', '11 Castle Court, AO29HY', 'P', 2458394),
('Gillian', '07582853190', '6 Maberley Avenue, WE42HN', 'S', 2839475),
('Howard', '07642955187', '115 Jide Drive, CO39SA', 'P', 2638424),
('Worley', '07816384964', '30 Opium Court, KL28QS', 'N', 2342638),
('Singh', '07517495394', '93 Maple Street, QW35JN', 'S', 2568429),
('Duke', '07621808321', '80 Sesame Avenue, KL50RU', 'S', 2557391);
```

```
INSERT INTO adgf088_Vet(vetID, vet_name, v_telephone, v_address, title,
jobDuration)
```

```
VALUES(39842, 'Sarah Williams', '07494302357', '14 Wemberley Drive,
SW30NB', 'Miss', 05),
(37624, 'Daniel Hugh', '07394130841', NULL, 'Mr', 02),
(32856, 'Kirsty Wright', '07184372209', '108 Bale Drive, SM79EY', 'Mrs',
03),
(37314, 'Lisa Fu', '07324486136', NULL, 'Mrs', 07),
(31093, 'John Black', '07610736238', '19 Green Court, TD28JK', 'Mr', 03),
(36190, 'Derek Nash', '07294750145', '51 Valley Drive, KL45OP', 'Mr', 10),
(30312, 'Lily Younge', '07345209621', NULL, 'Mrs', 09),
(39734, 'Amy Ferguson', '07213983120', '20 Dew Street, AO94UI', 'Miss',
01),
(39283, 'Oliver Thompson', '07472491739', '105 Burrow Street,
QH83LC', 'Mr', 04),
(38629, 'Emilia Clark', '07391401834', '85 Miller Road, WE41OV', NULL, 06),
(31634, 'Terry Farlow', '07364193180', '10 Gable Court, SD71LK', 'Mr', 01);
```

```
INSERT INTO adgf088_MedPrescribed(medicineID, medName, manufacturerName,
medType)
```

```
VALUES(845248, 'Verillin', 'VAXINC', 'Painkiller'),
(830909, 'Normalex', 'NeraPharm', 'Antibiotic'),
(835931, 'Methalix', 'VAXINC', 'Laxitive'),
(864201, 'Bethanol', 'Helajab', 'Vaccine'),
(849252, 'Tri-butalec', 'Pfizer', 'Anti-fungal'),
(852597, 'Phormatidine', 'NeraPharm', 'Antihistamine'),
(825105, 'Valexicon', 'Clinixia', 'Antacid'),
(832560, 'Metadine', 'Helajab', 'Antiseptic'),
```

```
(846019, 'Kizanex', 'Pharmacon', 'Ointment'),
(819328, 'Narofon', 'Pfizer', 'Sedative'),
(850412, 'Optomin', 'Pharmacon', 'Antiviral');
```

```
INSERT INTO adgf088_Appointment(appointmentID, appointDate, appointTime,
description, appointDuration, vetID, petID, medicineID)
VALUES(512494032, '07/08/20', '10:00', 'Broken left leg', 30, 30312,
2345241, 845248),
(584920523, '14/04/19', '15:45', 'Sickness bug', 15, 39283, 2793094,
830909),
(538561947, '11/02/21', '12:30', 'Surgery preparation', 45, 38629,
2458394, 864201),
(584952452, '15/01/22', '17:00', 'Removal of fleas', 15, 31093, 2364893,
832560),
(569438357, '30/05/23', '13:00', 'Ingested bad food', 30, 37314, 2345241,
825105),
(589528492, '22/04/20', '16:15', 'Burn on fur', 15, 37624, 2557391,
846019),
(524847051, '18/07/22', '09:30', 'Surgery preparation', 45, 31634,
2835481, 832560),
(529475910, '26/10/21', '12:45', 'FowlPox vaccine', 15, 36190, 2638424,
864201),
(531304586, '14/01/23', '14:30', 'Broken right leg', 30, 39734, 2568429,
849252 ),
(518485607, '27/09/19', '10:00', 'High temperature and sickness', 60,
31093, 2342638, 850412 ),
(520624680, '19/08/22', '11:15', 'Surgery preparation', 45, 39842,
2947418, 852597);
```

```
/* SECTION 3 - UPDATE STATEMENTS */
```

```
UPDATE adgf088_Family
SET f_telephone = '07534103340', membership = 'S'
WHERE petID = 2458394;
```

```
UPDATE adgf088_Vet
SET vet_name = 'Lily Morris', v_address = '63 Highland Avenue, ER28YU',
title = 'Mrs'
WHERE vetID = 30312;
```

```
/* SECTION 4 - SINGLE TABLE SELECT STATEMENTS - The queries must be
explained in natural (English) language first, and then followed up by
respective SELECTs*/
```

```
/*
1) List the surnames and pet IDs in the family table which contain the
words: 'Street' or 'Court' in the address
*/
```

```
SELECT surname, petID
FROM adgf088_Family
WHERE f_address LIKE "%Street%" OR f_address LIKE "%Court%"
```

```
ORDER BY surname;
```

```
/*
```

```
2) List the pet names and pet types in the pet table that contain a value  
in descending order
```

```
*/
```

```
SELECT pet_name, petType  
FROM adgf088_Pet  
WHERE petBreed IS NOT NULL  
ORDER BY pet_name DESC;
```

```
/*
```

```
3) List the pet IDs and pet names of pets that were born between the  
years, 2020 and 2022, in alphabetical order of pet names
```

```
*/
```

```
SELECT petID, pet_name  
FROM adgf088_Pet  
WHERE birthYear < 2022 AND birthYear >= 2020  
ORDER BY pet_name;
```

```
/*
```

```
4) List the number of manufacturer names in the medPrescribed table that  
contain the letters 'fiz' within the name
```

```
*/
```

```
SELECT COUNT(manufacturerName) FROM adgf088_MedPrescribed  
WHERE manufacturerName LIKE "_fiz%";
```

```
/*
```

```
5) Display the total average job duration (up till present) of female  
vets working in the clinic
```

```
*/
```

```
SELECT AVG(jobDuration)  
FROM adgf088_Vet  
WHERE title = "Miss" OR title = "Mrs";
```

```
/*
6) Display the number of appointments of different lengths from the
appointment table
*/
```

```
SELECT COUNT(DISTINCT appointDuration) FROM adgf088_Appointment;
```

```
/* SECTION 5 - MULTIPLE TABLE SELECT STATEMENTS - The queries must be
explained in natural (English) language first, and then followed up by
respective SELECTs */
```

```
/*
1) Display the Appointment ID and pet name records together only where
the appointment duration was less than 45 minutes
*/
```

```
SELECT adgf088_Appointment.AppointmentID, adgf088_Pet.pet_name
FROM adgf088_Appointment
INNER JOIN adgf088_Pet ON adgf088_Appointment.PetID = adgf088_Pet.PetID
WHERE adgf088_Appointment.appointDuration < 45;
```

```
/*
2) Display which vet prescribed which medicine and what the description
of the appointment was. Also display all the records in the Appointment
and MedPrescribed table
*/
```

```
SELECT adgf088_Vet.vetID, adgf088_Vet.vet_name,
adgf088_Appointment.description, adgf088_MedPrescribed.medName
FROM adgf088_Vet
RIGHT JOIN adgf088_Appointment ON adgf088_Vet.vetID =
adgf088_Appointment.vetID
RIGHT JOIN adgf088_MedPrescribed ON adgf088_Appointment.medicineID =
adgf088_MedPrescribed.medicineID;
```

```
/*
3) Return all the records from both tables, Family and Pet. Display
family surnames and which pet type and pet breed they own
*/
```

```
SELECT adgf088_Family.surname, adgf088_Pet.petType, adgf088_Pet.petBreed
FROM adgf088_Family
CROSS JOIN adgf088_Pet
WHERE adgf088_Family.petID = adgf088_Pet.petID AND adgf088_Pet.petBreed
IS NOT NULL;
```

```
/*  
4) First select the medicine ID from appointments that lasted 15 minutes.  
Then display the name of the medicines which are not in that medicine ID  
list, ordered alphabetically  
*/
```

```
SELECT medName  
FROM adgf088_MedPrescribed  
WHERE medicineID NOT IN  
      (SELECT medicineID  
       FROM adgf088_Appointment  
       WHERE appointDuration = 15)  
ORDER BY medName;
```

```
/*  
5) Display the manufacturer name and how many times their medicines have  
been prescribed during appointments. Ensure they are grouped by the  
manufacturer name. Ensure the specific appointment ID is displayed aswell  
*/
```

```
SELECT adgf088_MedPrescribed.manufacturerName, COUNT(*),  
adgf088_Appointment.appointmentID FROM adgf088_MedPrescribed  
LEFT JOIN adgf088_Appointment ON adgf088_Appointment.medicineID =  
adgf088_MedPrescribed.medicineID  
GROUP BY manufacturerName;
```

```
/*  
6) Display the name of the pet which has more than one appointment  
included in the database and display the count for the number of  
appointments for that pet  
*/
```

```
SELECT adgf088_Pet.pet_name, COUNT(adgf088_Appointment.PetID)  
FROM adgf088_Appointment  
INNER JOIN adgf088_Pet ON adgf088_Appointment.petID = adgf088_Pet.petID  
GROUP BY pet_name  
HAVING COUNT(adgf088_Appointment.PetID) > 1;
```

```
/* SECTION 6 - DELETE ROWS (make sure the SQL is commented out in this  
section) */  
/*
```

```
DELETE FROM adgf088_Appointment WHERE appointDate = '14/01/23';
```

```
*/
```

```
/* Due to foreign keys, this DROP statement requires a primary key to be  
removed first from a different table, creating an extra delete command */  
/*
```

```
DELETE FROM adgf088_Appointment WHERE medicineID = 832560;
```

```
DELETE FROM adgf088_MedPrescribed WHERE medicineID = 832560;
```

```
*/
```

```
/* SECTION 7 - DROP TABLES (make sure the SQL is commented out in this  
section)
```

```
DROP TABLE adgf088_Family;
```

```
DROP TABLE adgf088_Appointment;
```

```
DROP TABLE adgf088_Pet;
```

```
DROP TABLE adgf088_Vet;
```

```
DROP TABLE adgf088_MedPrescribed;
```

```
*/
```