Q:1 List the names of all pet owners along with the names of their pets.

```sql
-- List the names of all pet owners along with the names of their pets.
SELECT po.name AS owner_name, p.name AS pet_name
FROM petowners po
JOIN pets p ON po.ownerid = p.ownerid;
```

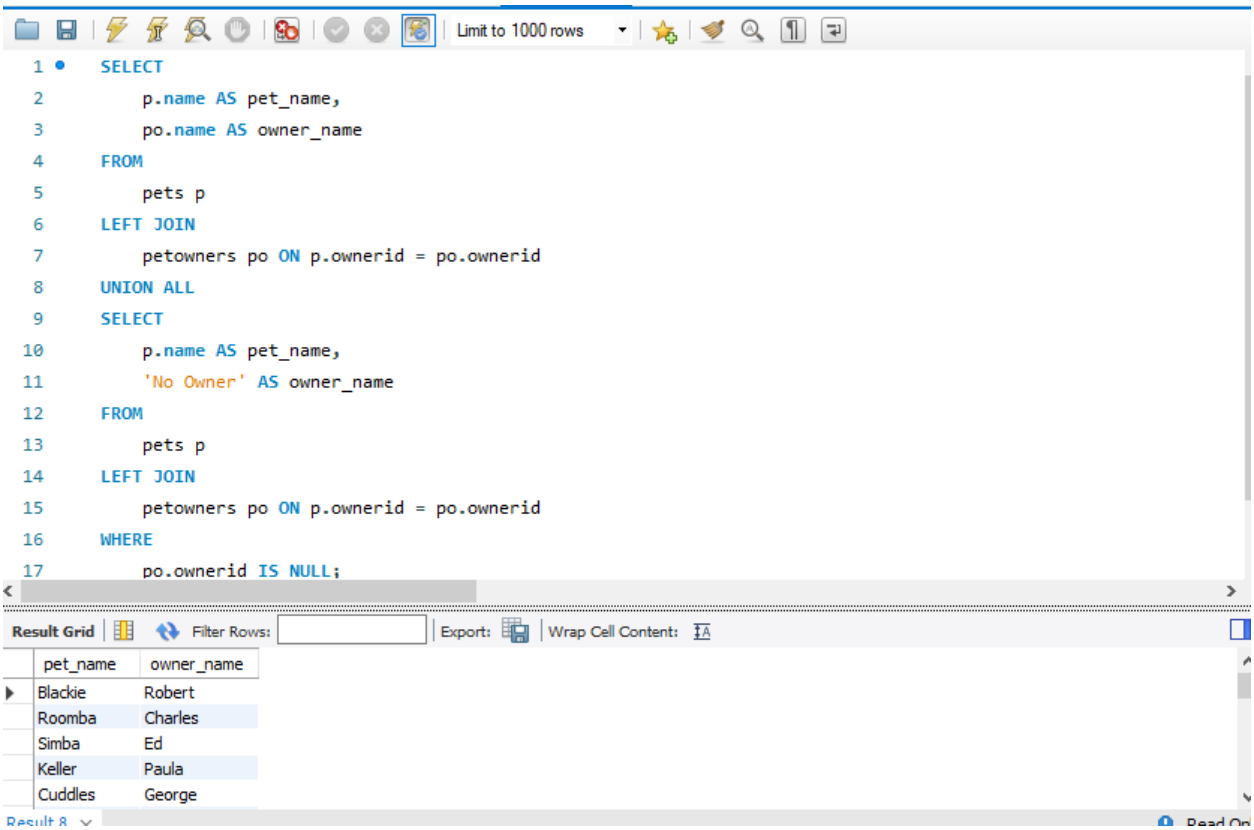
owner_name	pet_name
Robert	Blackie
Charles	Roomba
Ed	Simba
Paula	Keller
George	Cuddles
Florence	Vuitton
Bobbie	Priya
Wm	Simba
Edna	Cookie
Joe	Heisenberg

Q:2 List all pets and their owner names, including pets that don't have recorded owners

```sql
SELECT p.name AS pet_name,
       CASE
           WHEN po.name IS NULL THEN 'No Owner'
           ELSE po.name
       END AS owner_name
FROM pets p
LEFT JOIN petowners po ON p.ownerid = po.ownerid;
```

pet_name	owner_name
Blackie	Robert
Roomba	Charles
Simba	Ed
Keller	Paula
Cuddles	George

Q;3 Combine the information of pets and their owners, including those pets without owners and owners without pets.



```sql
SELECT
    p.name AS pet_name,
    po.name AS owner_name
FROM
    pets p
LEFT JOIN
    petowners po ON p.ownerid = po.ownerid
UNION ALL
SELECT
    p.name AS pet_name,
    'No Owner' AS owner_name
FROM
    pets p
LEFT JOIN
    petowners po ON p.ownerid = po.ownerid
WHERE
    po.ownerid IS NULL;
```

Result Grid

pet_name	owner_name
Blackie	Robert
Roomba	Charles
Simba	Ed
Keller	Paula
Cuddles	George

Q:4 List all pet owners and the number of dogs they own.

```
1   -- List all pet owners and the number of dogs they own.
2   select po.Name,count(kind) AS number_Dogs from petowners as po
3   join pets p Using (ownerID) -- we can use (USING) instead of ON if we have same name of column in PK and FK
4   where kind= 'dog'
5   group by Name;
6
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Name	number_Dogs
Debbie	1
John	1
Connie	1
Lena	1
Jessica	1
Bessie	1
Luisa	1

Q:5 Identify pets that have not had any procedures.

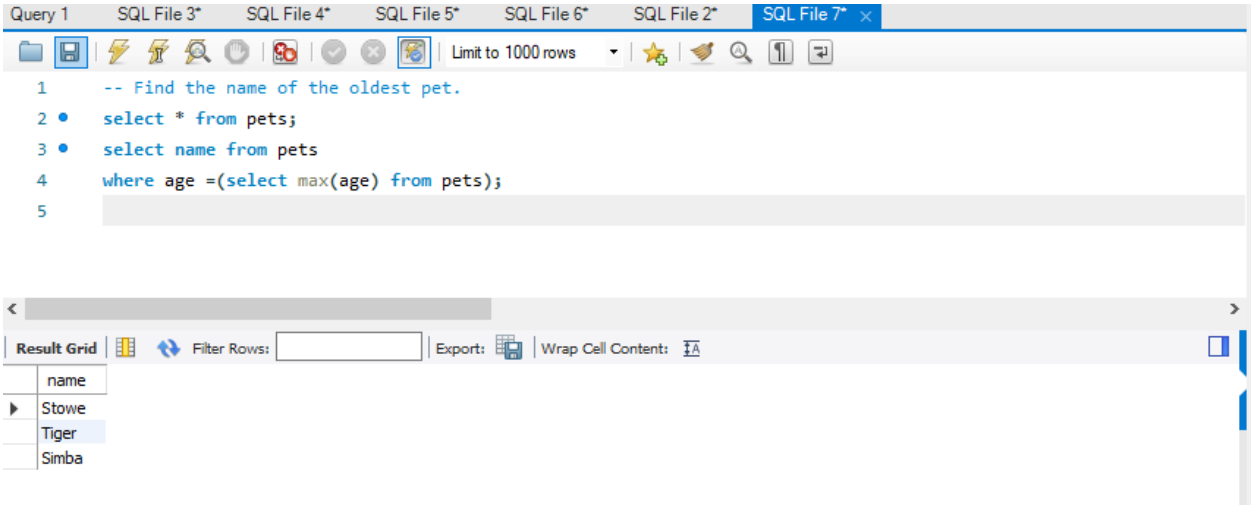
```
1   -- Identify pets that have not had any procedures.
2   Select p.name As pet_name,ph.ProcedureType from pets As p
3   left join procedureshistory ph On p.PetID=ph.PetID
4   where ph.PetID is null;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

pet_name	ProcedureType
Roomba	NULL
Keller	NULL
Priya	NULL
Simba	NULL
Heisenberg	NULL

Result 10 | Read Only

Q:6 Find the name of the oldest pet.



Q 6 can also be done on this query

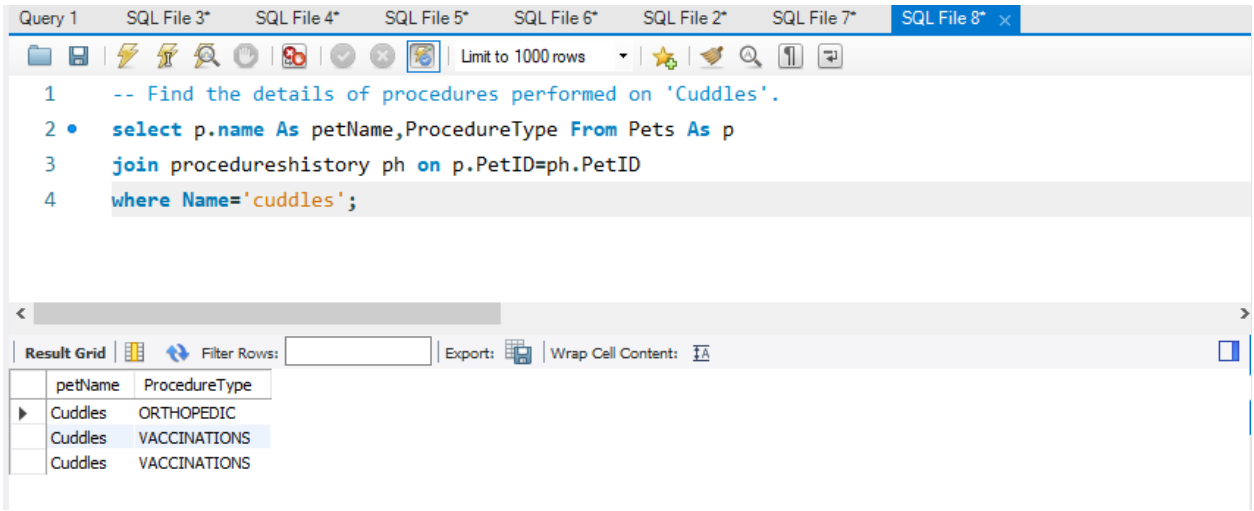
SELECT name AS oldest_pet_name

FROM pets

ORDER BY age DESC

LIMIT 1;

Q:7 Find the details of procedures performed on 'Cuddles'.



Q:8 List the pets who have undergone a procedure called 'VACCINATIONS'

```
-- List the pets who have undergone a procedure called 'VACCINATIONS'
select Name,procedureType from pets As p
join procedureshistory ph on p.PetID=ph.PetID
where ProcedureType='Vaccinations';
```

Name	procedureType
Humbert	VACCINATIONS
Jake	VACCINATIONS
Bandit	VACCINATIONS
Cuddles	VACCINATIONS
Rumba	VACCINATIONS

Q:9 Count the number of pets of each kind

```
-- Count the number of pets of each kind
select kind,count(*) As Total_pet from pets
group by kind;
```

kind	Total_pet
Dog	57
Cat	31
Parrot	12

Q;10 Group pets by their kind and gender and count the number of pets in each group.

SQL File 4* SQL File 5* SQL File 6* SQL File 2* SQL File 7* SQL File 8* SQL File 9* SQL File 10* SQL File 11*

Limit to 1000 rows

```
1   -- Group pets by their kind and gender and count the number of pets in each group.
2   select kind,gender,count(name) from pets
3   group by kind,gender;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

kind	gender	count(name)
Dog	male	35
Cat	male	19
Parrot	female	7
Cat	female	12
Dog	female	22

Result 1

Q:11 Show the average age of pets for each kind, but only for kinds that have more than 5 pets

SQL File 5* SQL File 6* SQL File 2* SQL File 7* SQL File 8* SQL File 9* SQL File 10* SQL File 11

Limit to 1000 rows

```
1   -- Show the average age of pets for each kind, but only for kinds that have more than 5
2   -- pets
3   select kind,avg(age) As average_age from pets
4   group by kind
5   having count(*)>5;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

kind	average_age
Dog	6.7895
Cat	7.3226
Parrot	6.5833

Q:12 Find the types of procedures that have an average cost greater than $50.

```
-- Find the types of procedures that have an average cost greater than $50.
select ph.procedureType,avg(price) As Average_price from procedureshistory as ph
join proceduresdetails pd on ph.ProcedureSubCode=pd.ProcedureSubCode
group by ProcedureType
having Average_price>50;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

procedureType	Average_price
HOSPITALIZATION	106.1667
GENERAL SURGERIES	121.7497
ORTHOPEDIC	135.8387
OFFICE FEES	75.8125
VACCINATIONS	213.7362

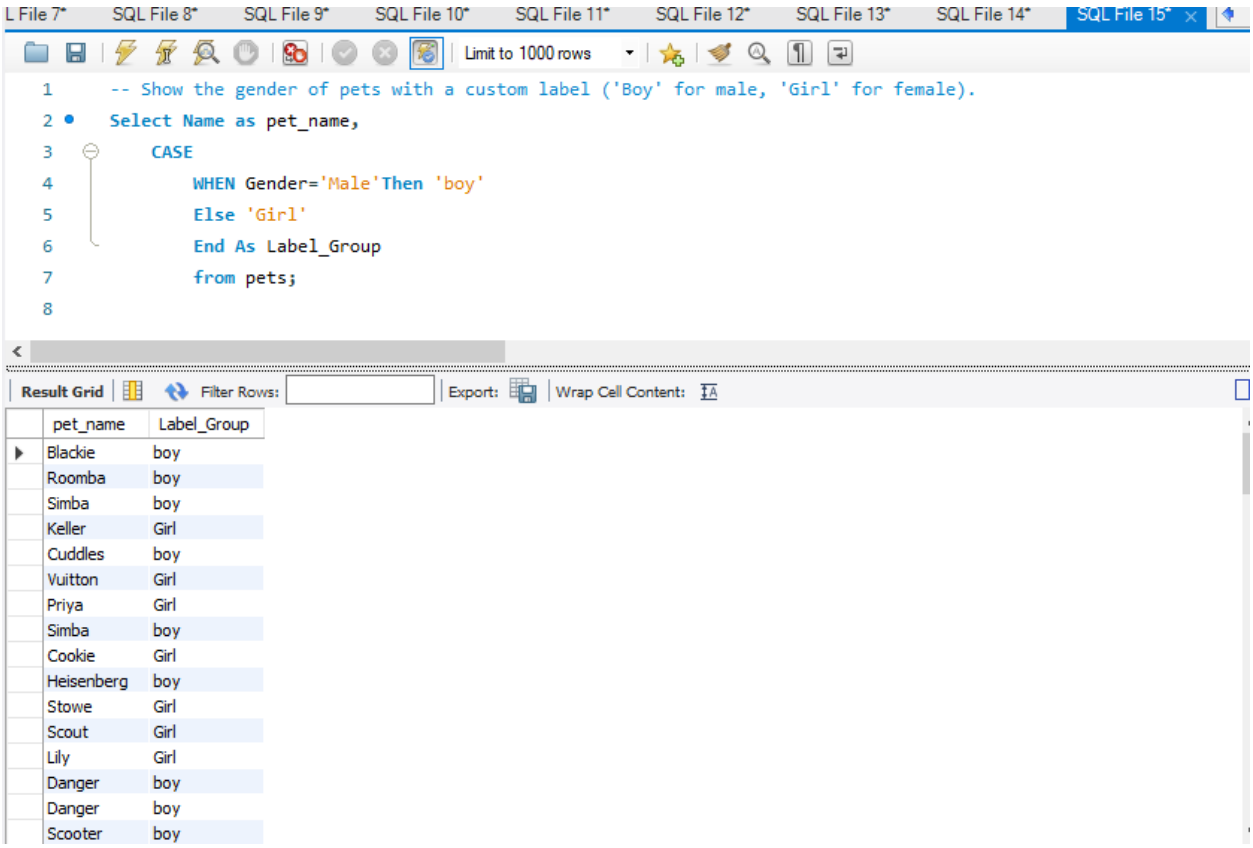
Q:13 Classify pets as 'Young', 'Adult', or 'Senior' based on their age. Age less then 3 Young, Age between 3 and 8 Adult, else Senior.

```
-- Classify pets as 'Young', 'Adult', or 'Senior' based on their age. Age less then 3
-- Young, Age between 3and 8 Adult, else Senior.
SELECT name,
    CASE
        WHEN age < 3 THEN 'Young'
        WHEN age > 3 AND age <= 8 THEN 'Adult'
        ELSE 'Senior'
    END AS age_group
FROM pets;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

name	age_group
Blackie	Senior
Roomba	Senior
Simba	Young
Keller	Young
Cuddles	Senior
Vuitton	Senior
Priya	Adult
Simba	Young

Q:14 Show the gender of pets with a custom label ('Boy' for male, 'Girl' for female).



Q:15 For each pet, display the pet's name, the number of procedures they've had, and a status label: 'Regular' for pets with 1 to 3 procedures, 'Frequent' for 4 to 7 procedures, and 'Super User' for more than 7 procedures.