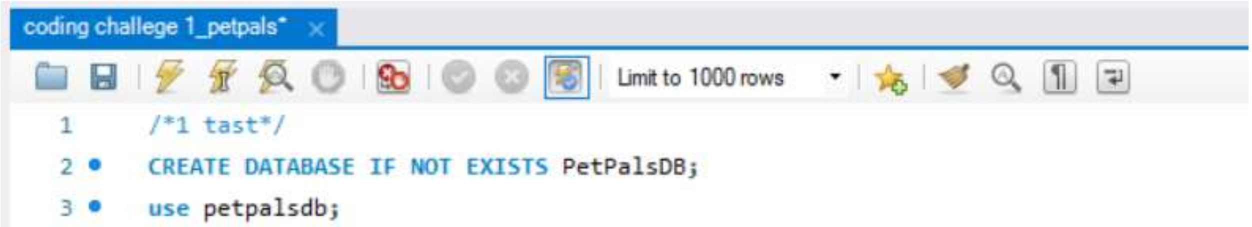
Coding Challenge

PETPALS

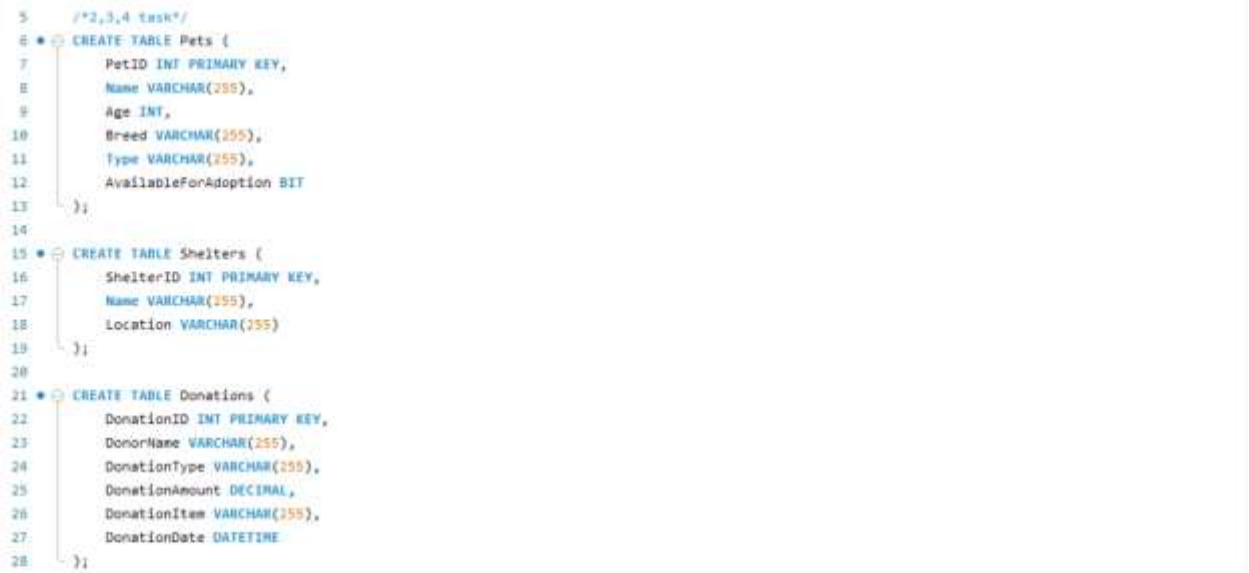
TASKS:

1.

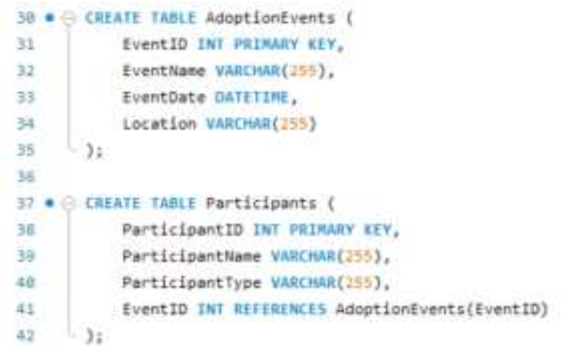


```
/*1 tast*/
CREATE DATABASE IF NOT EXISTS PetPalsDB;
use petpalsdb;
```

2,3&4.

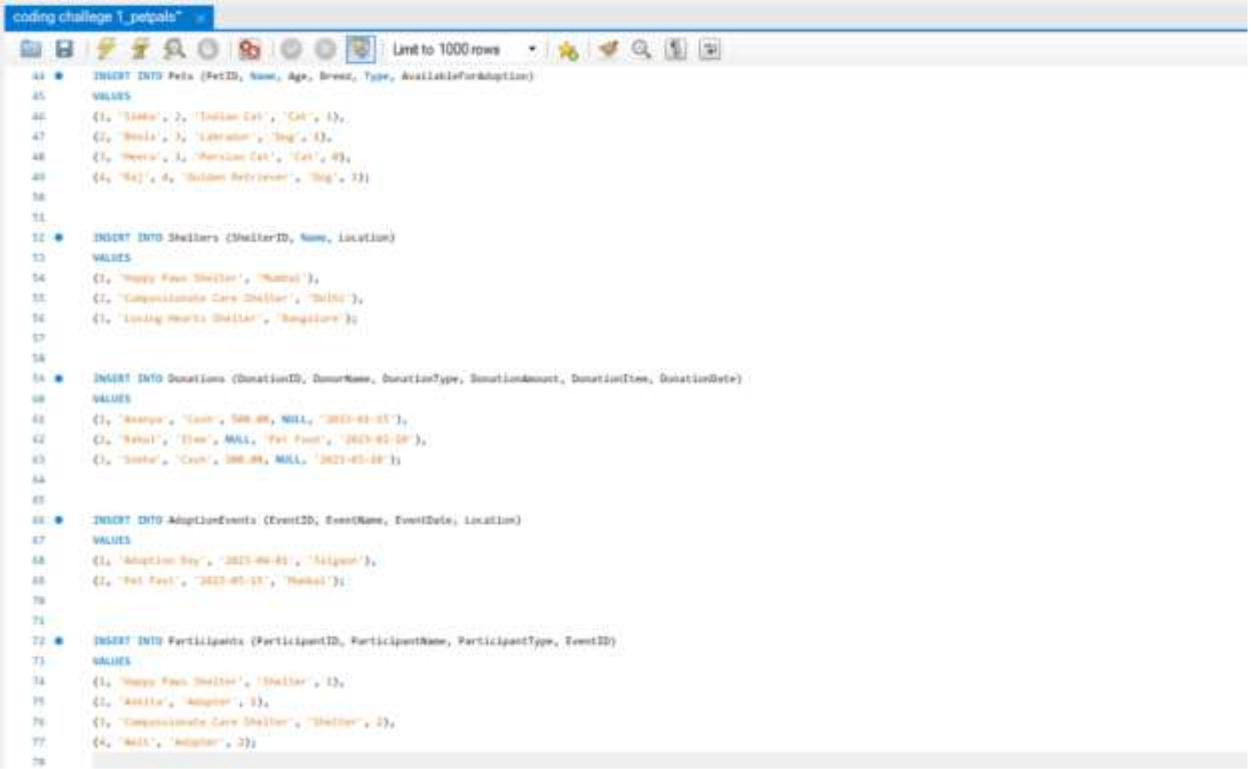


```
/*2,3,4 task*/
CREATE TABLE Pets (
    PetID INT PRIMARY KEY,
    Name VARCHAR(255),
    Age INT,
    Breed VARCHAR(255),
    Type VARCHAR(255),
    AvailableForAdoption BIT
);

CREATE TABLE Shelters (
    ShelterID INT PRIMARY KEY,
    Name VARCHAR(255),
    Location VARCHAR(255)
);

CREATE TABLE Donations (
    DonationID INT PRIMARY KEY,
    DonorName VARCHAR(255),
    DonationType VARCHAR(255),
    DonationAmount DECIMAL,
    DonationItem VARCHAR(255),
    DonationDate DATETIME
);
```



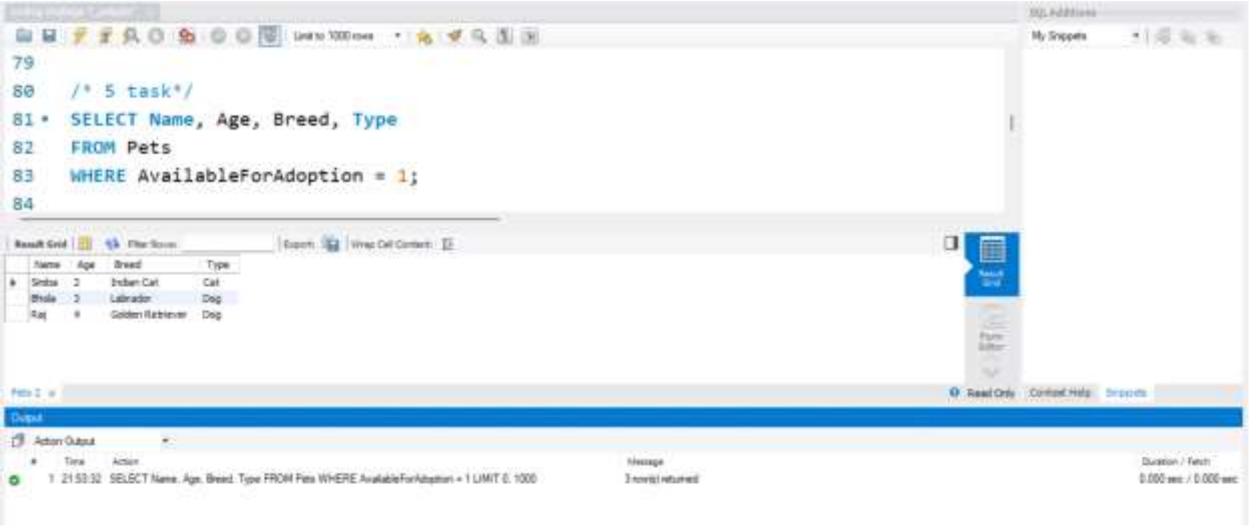
```
CREATE TABLE AdoptionEvents (
    EventID INT PRIMARY KEY,
    EventName VARCHAR(255),
    EventDate DATETIME,
    Location VARCHAR(255)
);

CREATE TABLE Participants (
    ParticipantID INT PRIMARY KEY,
    ParticipantName VARCHAR(255),
    ParticipantType VARCHAR(255),
    EventID INT REFERENCES AdoptionEvents(EventID)
);
```

Data Insertion:



```
INSERT INTO Pets (PetID, Name, Age, Breed, Type, AvailableForAdoption)
VALUES
(1, 'Simba', 2, 'Indian Cat', 'Cat', 1),
(2, 'Bholu', 3, 'Labrador', 'Dog', 1),
(3, 'Meera', 1, 'Persian Cat', 'Cat', 0),
(4, 'Raj', 4, 'Golden Retriever', 'Dog', 1);


INSERT INTO Shelters (ShelterID, Name, Location)
VALUES
(1, 'Happy Paws Shelter', 'Mumbai'),
(2, 'Compassionate Care Shelter', 'Delhi'),
(3, 'Loving Hearts Shelter', 'Bangalore');


INSERT INTO Donations (DonationID, DonorName, DonationType, DonationAmount, DonationItem, DonationDate)
VALUES
(1, 'Ananya', 'Cash', 500.00, NULL, '2023-03-15'),
(2, 'Rahul', 'Item', NULL, 'Pet Food', '2023-03-20'),
(3, 'Sneha', 'Cash', 300.00, NULL, '2023-03-28');


INSERT INTO AdoptionEvents (EventID, EventName, EventDate, Location)
VALUES
(1, 'Adoption Day', '2023-04-01', 'Jaipur'),
(2, 'Pet Fest', '2023-05-15', 'Mumbai');


INSERT INTO Participants (ParticipantID, ParticipantName, ParticipantType, EventID)
VALUES
(1, 'Happy Paws Shelter', 'Shelter', 1),
(2, 'Ankita', 'Adopter', 1),
(3, 'Compassionate Care Shelter', 'Shelter', 2),
(4, 'Amit', 'Adopter', 2);
```

5.

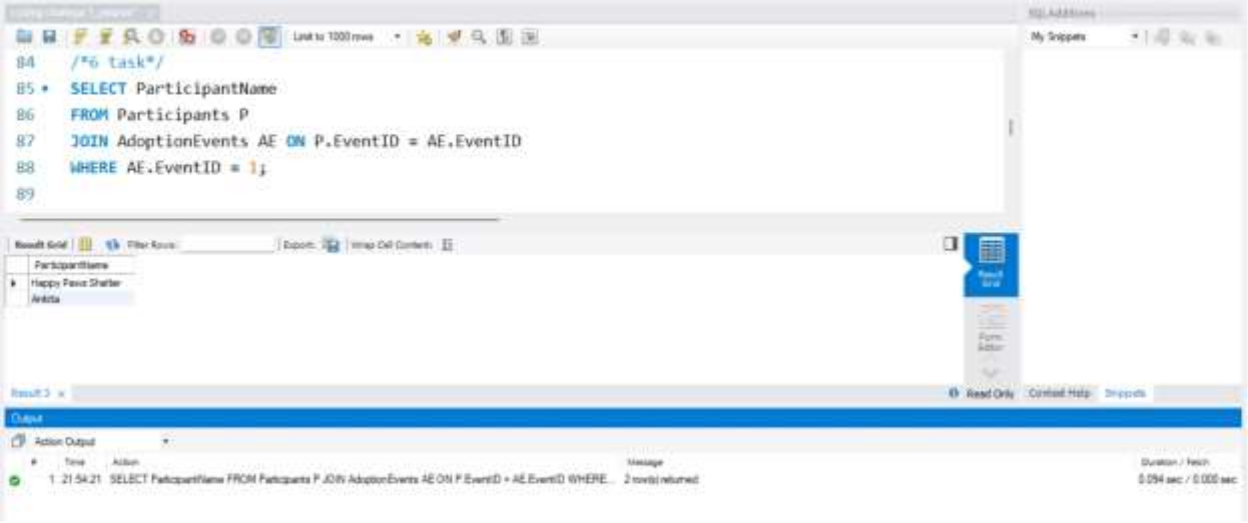


```sql
/* 5 task*/
SELECT Name, Age, Breed, Type
FROM Pets
WHERE AvailableForAdoption = 1;
```

Name	Age	Breed	Type
Simba	2	Indian Cat	Cat
Bhola	3	Labrador	Dog
Raj	4	Golden Retriever	Dog

```
#  Time      Action                                                                      Message              Duration / Fetch
1  21:53:32  SELECT Name, Age, Breed, Type FROM Pets WHERE AvailableForAdoption = 1 LIMIT 0, 1000  3 row(s) returned  0.000 sec / 0.000 sec
```

6.

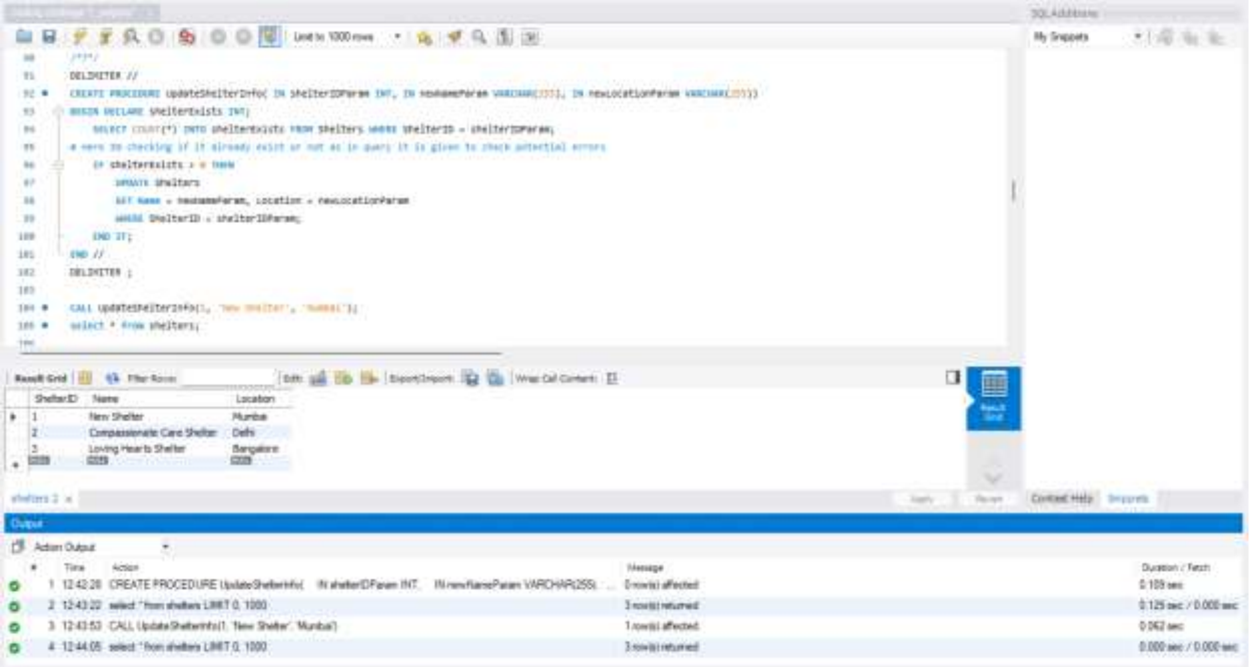


```sql
/*6 task*/
SELECT ParticipantName
FROM Participants P
JOIN AdoptionEvents AE ON P.EventID = AE.EventID
WHERE AE.EventID = 1;
```

ParticipantName
Happy Paws Shelter
Ankita

```
#  Time      Action                                                                            Message              Duration / Fetch
1  21:54:21  SELECT ParticipantName FROM Participants P JOIN AdoptionEvents AE ON P.EventID = AE.EventID WHERE...  2 row(s) returned  0.094 sec / 0.000 sec
```

7.

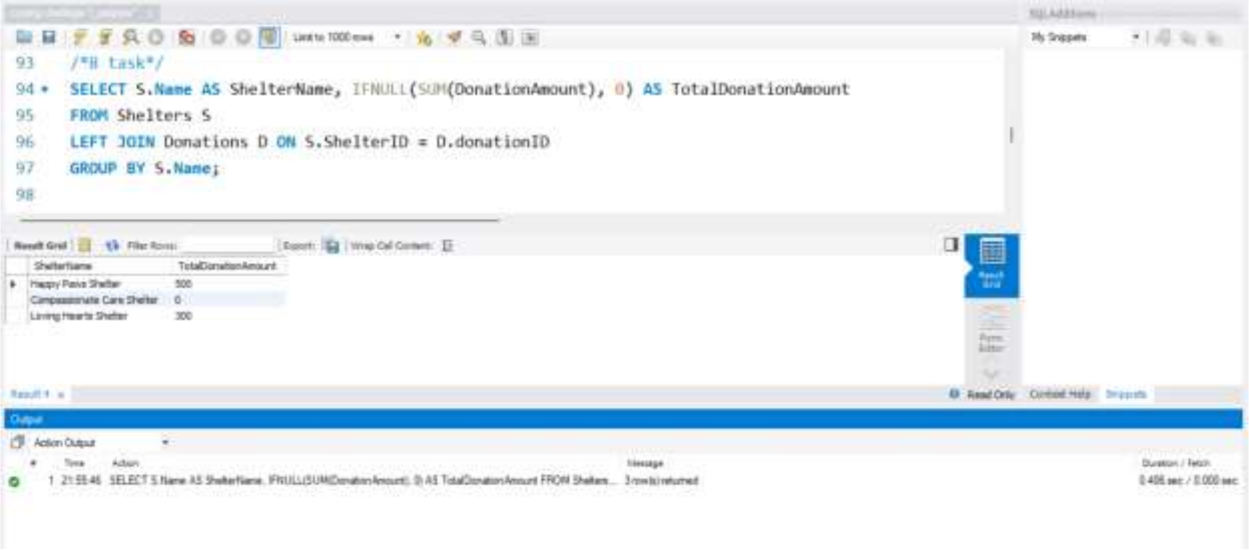


```
/*7*/
DELIMITER //
CREATE PROCEDURE updateShelterInfo( IN shelterIDParam INT, IN newNameParam VARCHAR(255), IN newLocationParam VARCHAR(255))
BEGIN DECLARE shelterExists INT;
    SELECT COUNT(*) INTO shelterExists FROM Shelters WHERE ShelterID = shelterIDParam;
# here im checking if it already exist or not as in query it is given to check potential errors
    IF shelterExists > 0 THEN
        UPDATE Shelters
        SET Name = newNameParam, Location = newLocationParam
        WHERE ShelterID = shelterIDParam;
    END IF;
END //
DELIMITER ;

CALL updateShelterInfo(1, 'New Shelter', 'Mumbai');
select * from shelters;
```

ShelterID	Name	Location
1	New Shelter	Mumbai
2	Compassionate Care Shelter	Delhi
3	Loving Hearts Shelter	Bangalore
NULL	NULL	NULL

```
#  Time      Action                                                                         Message              Duration / Fetch
1  12:42:28  CREATE PROCEDURE UpdateShelterInfo(   IN shelterIDParam INT,   IN newNameParam VARCHAR(255), ...  0 row(s) affected  0.109 sec
2  12:43:22  select * from shelters LIMIT 0, 1000                                          3 row(s) returned    0.125 sec / 0.000 sec
3  12:43:53  CALL UpdateShelterInfo(1, 'New Shelter', 'Mumbai')                            1 row(s) affected    0.062 sec
4  12:44:05  select * from shelters LIMIT 0, 1000                                          3 row(s) returned    0.000 sec / 0.000 sec
```

8.

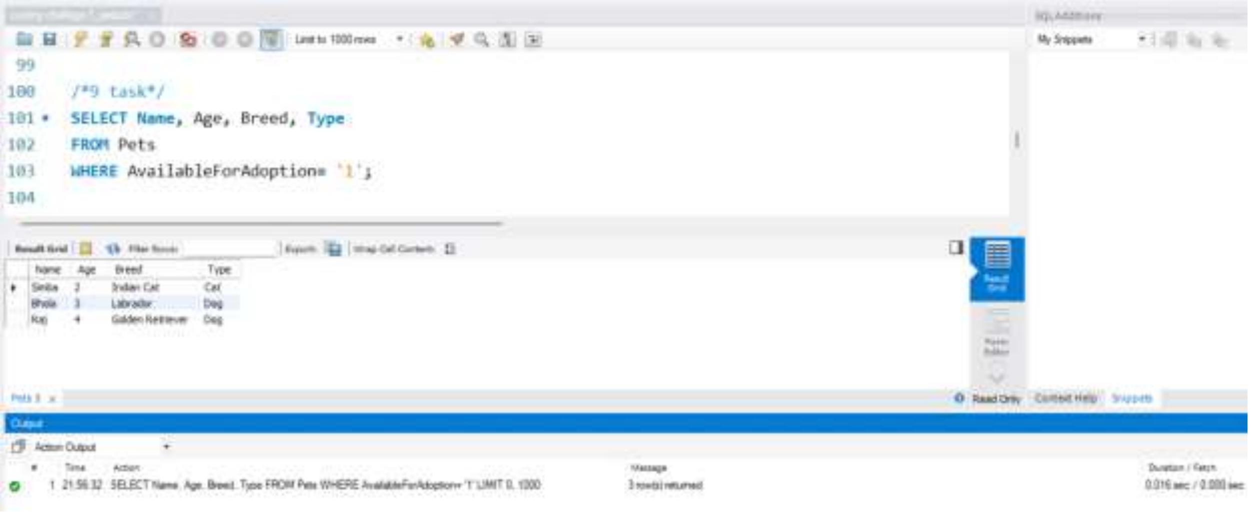


```
/*8 task*/
SELECT S.Name AS ShelterName, IFNULL(SUM(DonationAmount), 0) AS TotalDonationAmount
FROM Shelters S
LEFT JOIN Donations D ON S.ShelterID = D.donationID
GROUP BY S.Name;
```

ShelterName	TotalDonationAmount
Happy Paws Shelter	500
Compassionate Care Shelter	0
Loving Hearts Shelter	300

```
#  Time      Action                                                                                   Message              Duration / Fetch
1  21:55:46  SELECT S.Name AS ShelterName, IFNULL(SUM(DonationAmount), 0) AS TotalDonationAmount FROM Shelters...  3 row(s) returned  0.406 sec / 0.000 sec
```

9.

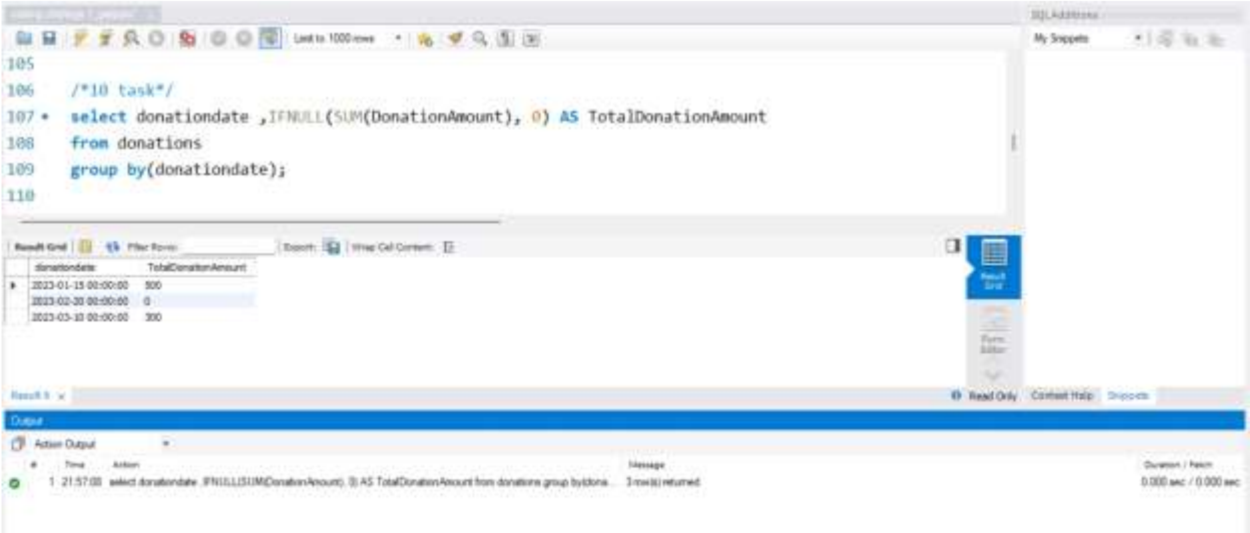


```sql
/*9 task*/
SELECT Name, Age, Breed, Type
FROM Pets
WHERE AvailableForAdoption= '1';
```

Name	Age	Breed	Type
Simba	2	Indian Cat	Cat
Bhola	3	Labrador	Dog
Raj	4	Golden Retriever	Dog

```
#  Time      Action                                                                        Message             Duration / Fetch
1  21:56:32  SELECT Name, Age, Breed, Type FROM Pets WHERE AvailableForAdoption= '1' LIMIT 0, 1000   3 row(s) returned   0.016 sec / 0.000 sec
```

10.

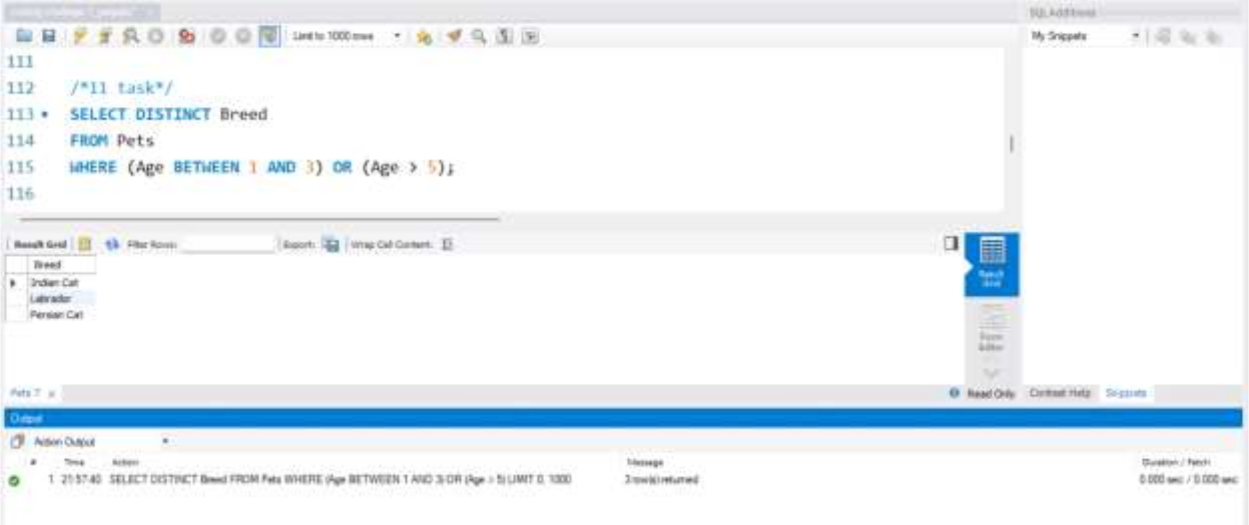


```sql
/*10 task*/
select donationdate ,IFNULL(SUM(DonationAmount), 0) AS TotalDonationAmount
from donations
group by(donationdate);
```

donationdate	TotalDonationAmount
2023-01-15 00:00:00	500
2023-02-20 00:00:00	0
2023-03-10 00:00:00	300

```
#  Time      Action                                                                                    Message             Duration / Fetch
1  21:57:00  select donationdate ,IFNULL(SUM(DonationAmount), 0) AS TotalDonationAmount from donations group by(dona...   3 row(s) returned   0.000 sec / 0.000 sec
```

11.

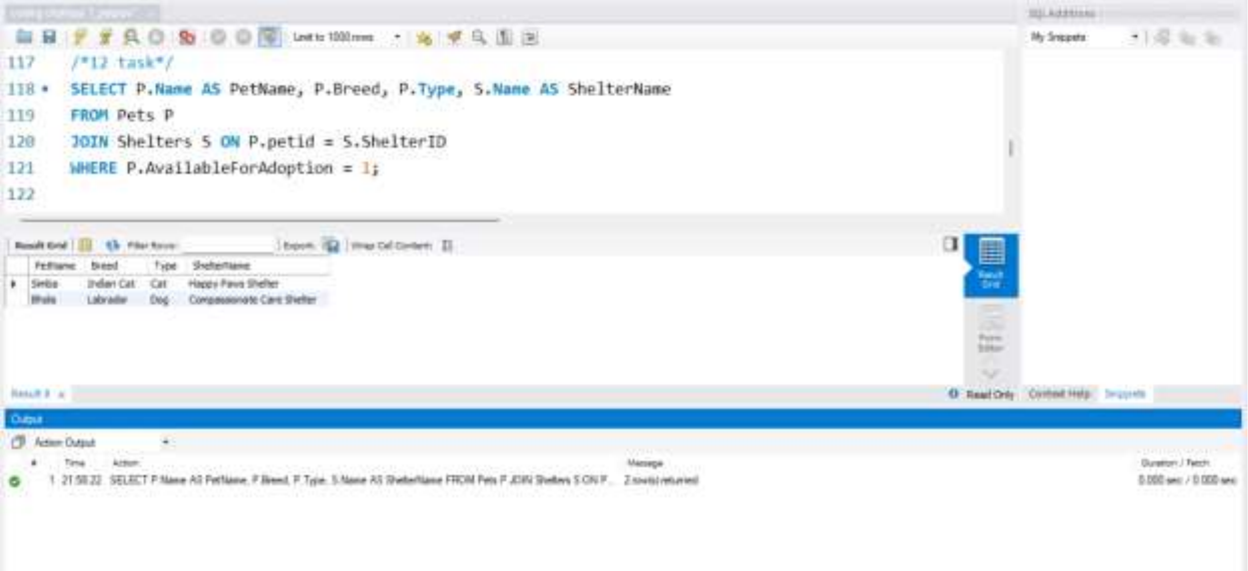


```sql
/*11 task*/
SELECT DISTINCT Breed
FROM Pets
WHERE (Age BETWEEN 1 AND 3) OR (Age > 5);
```

Breed
Indian Cat
Labrador
Persian Cat

```
#  Time      Action                                                                                  Message             Duration / Fetch
1  21:57:40  SELECT DISTINCT Breed FROM Pets WHERE (Age BETWEEN 1 AND 3) OR (Age > 5) LIMIT 0, 1000  3 row(s) returned   0.000 sec / 0.000 sec
```

12.

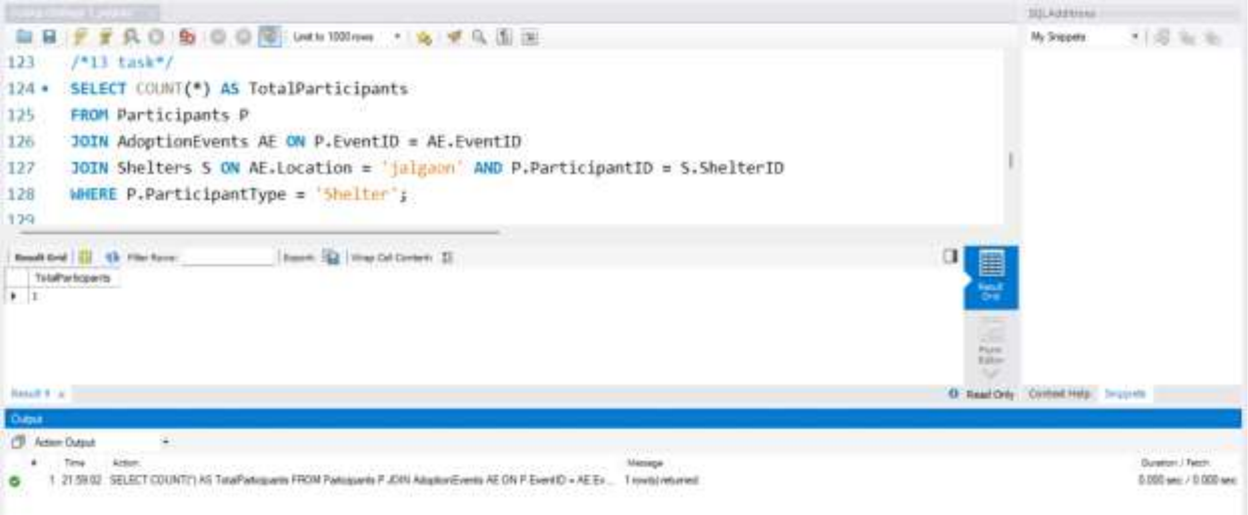


```sql
/*12 task*/
SELECT P.Name AS PetName, P.Breed, P.Type, S.Name AS ShelterName
FROM Pets P
JOIN Shelters S ON P.petid = S.ShelterID
WHERE P.AvailableForAdoption = 1;
```

PetName	Breed	Type	ShelterName
Simba	Indian Cat	Cat	Happy Paws Shelter
Whale	Labrador	Dog	Compassionate Care Shelter

```
#  Time      Action                                                                              Message             Duration / Fetch
1  21:58:22  SELECT P.Name AS PetName, P.Breed, P.Type, S.Name AS ShelterName FROM Pets P JOIN Shelters S ON P...  2 row(s) returned   0.000 sec / 0.000 sec
```

13.

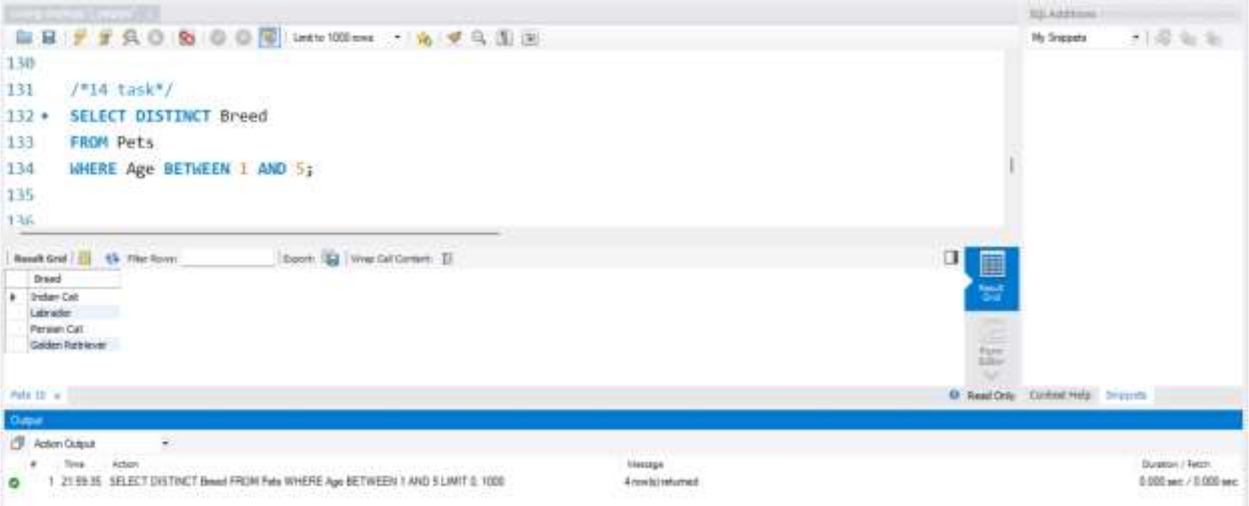


```sql
/*13 task*/
SELECT COUNT(*) AS TotalParticipants
FROM Participants P
JOIN AdoptionEvents AE ON P.EventID = AE.EventID
JOIN Shelters S ON AE.Location = 'jalgaon' AND P.ParticipantID = S.ShelterID
WHERE P.ParticipantType = 'Shelter';
```

TotalParticipants
1

```
#   Time      Action                                                                        Message             Duration / Fetch
1   21:59:02  SELECT COUNT(*) AS TotalParticipants FROM Participants P JOIN AdoptionEvents AE ON P.EventID = AE.Ev...   1 row(s) returned   0.000 sec / 0.000 sec
```

14.

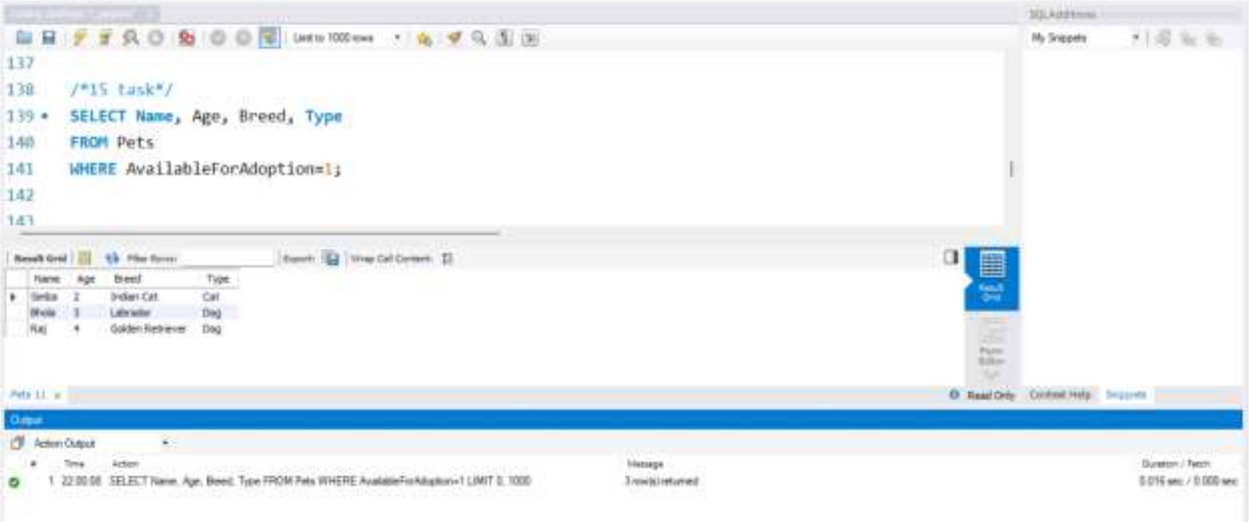


```sql
/*14 task*/
SELECT DISTINCT Breed
FROM Pets
WHERE Age BETWEEN 1 AND 5;
```

Breed
Indian Cat
Labrador
Persian Cat
Golden Retriever

```
#   Time      Action                                                              Message             Duration / Fetch
1   21:59:35  SELECT DISTINCT Breed FROM Pets WHERE Age BETWEEN 1 AND 5 LIMIT 0, 1000   4 row(s) returned   0.000 sec / 0.000 sec
```

15.

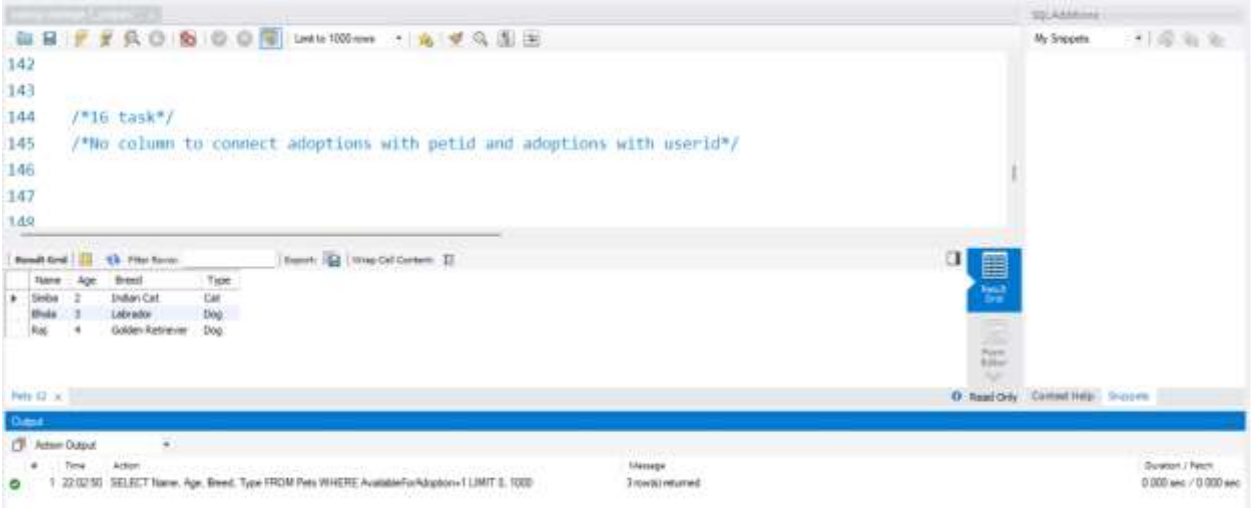


```
/*15 task*/
SELECT Name, Age, Breed, Type
FROM Pets
WHERE AvailableForAdoption=1;
```

Name	Age	Breed	Type
Simba	2	Indian Cat	Cat
Bhola	3	Labrador	Dog
Raj	4	Golden Retriever	Dog

```
#  Time      Action                                                                        Message             Duration / Fetch
1  22:00:08  SELECT Name, Age, Breed, Type FROM Pets WHERE AvailableForAdoption=1 LIMIT 0, 1000  3 row(s) returned  0.016 sec / 0.000 sec
```

16.

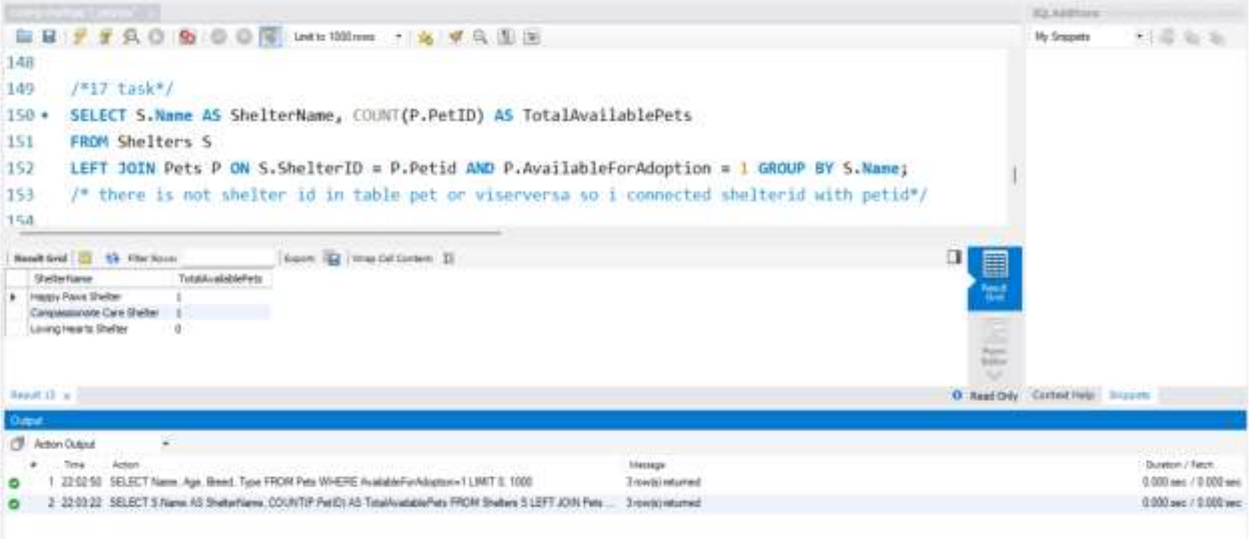


```
/*16 task*/
/*No column to connect adoptions with petid and adoptions with userid*/
```

Name	Age	Breed	Type
Simba	2	Indian Cat	Cat
Bhola	3	Labrador	Dog
Raj	4	Golden Retriever	Dog

```
#  Time      Action                                                                        Message             Duration / Fetch
1  22:02:50  SELECT Name, Age, Breed, Type FROM Pets WHERE AvailableForAdoption=1 LIMIT 0, 1000  3 row(s) returned  0.000 sec / 0.000 sec
```

17.

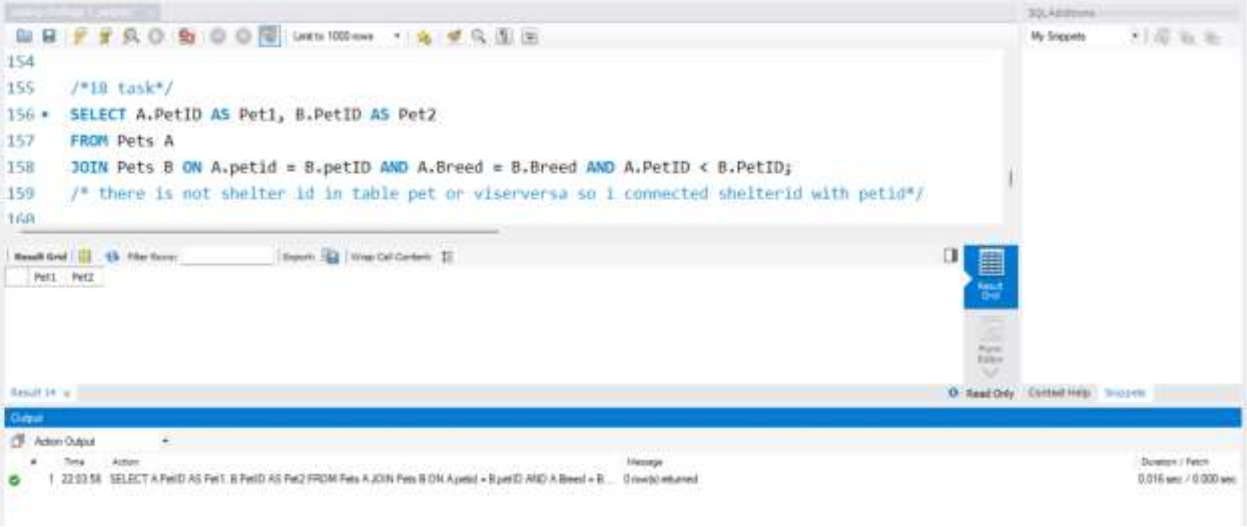


```sql
/*17 task*/
SELECT S.Name AS ShelterName, COUNT(P.PetID) AS TotalAvailablePets
FROM Shelters S
LEFT JOIN Pets P ON S.ShelterID = P.Petid AND P.AvailableForAdoption = 1 GROUP BY S.Name;
/* there is not shelter id in table pet or viserversa so i connected shelterid with petid*/
```

ShelterName	TotalAvailablePets
Happy Paws Shelter	1
Compassionate Care Shelter	1
Loving Hearts Shelter	0

```
#  Time      Action                                                                                    Message              Duration / Fetch
1  22:02:50  SELECT Name, Age, Breed, Type FROM Pets WHERE AvailableForAdoption=1 LIMIT 0, 1000      3 row(s) returned    0.000 sec / 0.000 sec
2  22:03:22  SELECT S.Name AS ShelterName, COUNT(P.PetID) AS TotalAvailablePets FROM Shelters S LEFT JOIN Pets ...   3 row(s) returned    0.000 sec / 0.000 sec
```

18.

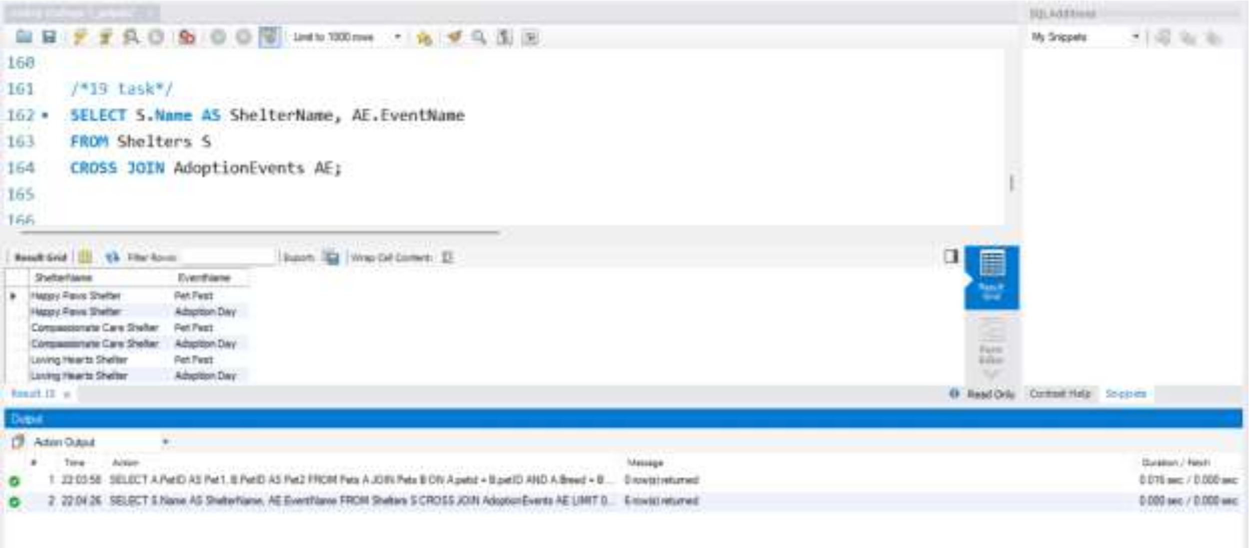


```sql
/*18 task*/
SELECT A.PetID AS Pet1, B.PetID AS Pet2
FROM Pets A
JOIN Pets B ON A.petid = B.petID AND A.Breed = B.Breed AND A.PetID < B.PetID;
/* there is not shelter id in table pet or viserversa so i connected shelterid with petid*/
```

Pet1	Pet2

```
#  Time      Action                                                                                    Message              Duration / Fetch
1  22:03:58  SELECT A.PetID AS Pet1, B.PetID AS Pet2 FROM Pets A JOIN Pets B ON A.petid = B.petID AND A.Breed = B...   0 row(s) returned    0.016 sec / 0.000 sec
```

19.

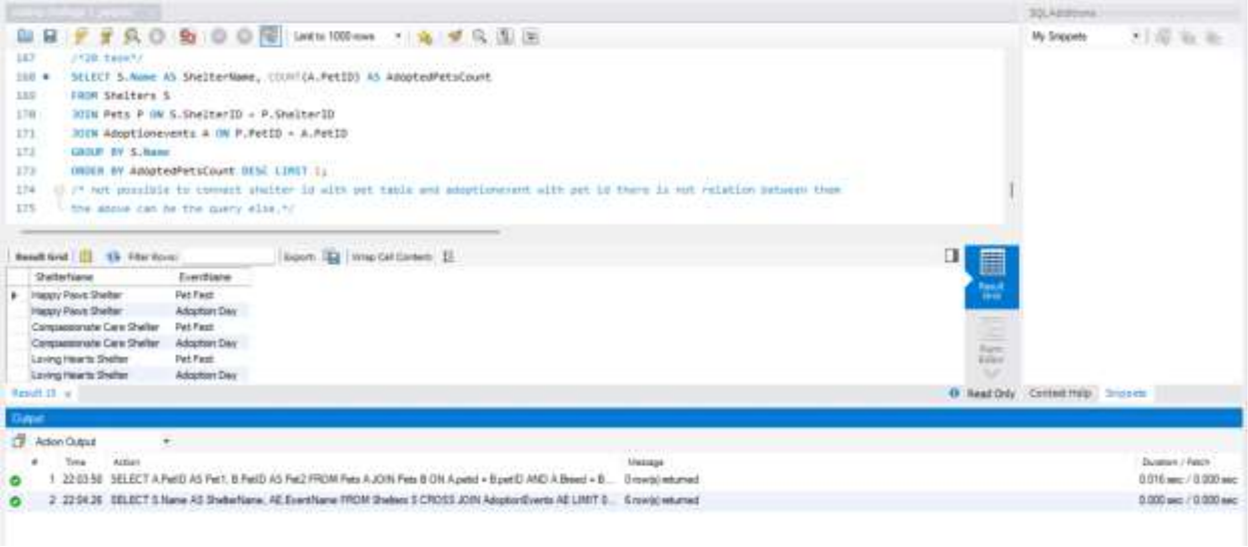


```sql
/*19 task*/
SELECT S.Name AS ShelterName, AE.EventName
FROM Shelters S
CROSS JOIN AdoptionEvents AE;
```

ShelterName	EventName
Happy Paws Shelter	Pet Fest
Happy Paws Shelter	Adoption Day
Compassionate Care Shelter	Pet Fest
Compassionate Care Shelter	Adoption Day
Loving Hearts Shelter	Pet Fest
Loving Hearts Shelter	Adoption Day

```
#  Time      Action                                                                                     Message            Duration / Fetch
1  22:03:58  SELECT A.PetID AS Pet1, B.PetID AS Pet2 FROM Pets A JOIN Pets B ON A.petid = B.petID AND A.Breed = B...  0 row(s) returned  0.016 sec / 0.000 sec
2  22:04:26  SELECT S.Name AS ShelterName, AE.EventName FROM Shelters S CROSS JOIN AdoptionEvents AE LIMIT 0...  6 row(s) returned  0.000 sec / 0.000 sec
```

20.



```sql
/*20 task*/
SELECT S.Name AS ShelterName, COUNT(A.PetID) AS AdoptedPetsCount
FROM Shelters S
JOIN Pets P ON S.ShelterID = P.ShelterID
JOIN Adoptionevents A ON P.PetID = A.PetID
GROUP BY S.Name
ORDER BY AdoptedPetsCount DESC LIMIT 1;
/* not possible to connect shelter id with pet table and adoptionevent with pet id there is not relation between them
the above can be the query else.*/
```

ShelterName	EventName
Happy Paws Shelter	Pet Fest
Happy Paws Shelter	Adoption Day
Compassionate Care Shelter	Pet Fest
Compassionate Care Shelter	Adoption Day
Loving Hearts Shelter	Pet Fest
Loving Hearts Shelter	Adoption Day

```
#  Time      Action                                                                                     Message            Duration / Fetch
1  22:03:58  SELECT A.PetID AS Pet1, B.PetID AS Pet2 FROM Pets A JOIN Pets B ON A.petid = B.petID AND A.Breed = B...  0 row(s) returned  0.016 sec / 0.000 sec
2  22:04:26  SELECT S.Name AS ShelterName, AE.EventName FROM Shelters S CROSS JOIN AdoptionEvents AE LIMIT 0...  6 row(s) returned  0.000 sec / 0.000 sec
```