MySQL CODING CHALLENGE

PETPALS

```
show databases;
create database petcenter;
use petcenter;
```

TABLE CREATION

```
create table if not exists shelters (
shelterid int primary key auto_increment ,
 name varchar (100) ,
 location varchar (100))
 ;

CREATE TABLE IF NOT EXISTS Pets (
    PetID INT PRIMARY KEY AUTO_INCREMENT,
    Name VARCHAR(100),
    Age INT,
    Breed VARCHAR(100),
    Type VARCHAR(50),
    AvailableForAdoption BIT,
    shelterid int ,
    foreign key (shelterid) REFERENCES shelters(shelterid) on delete cascade
);


create table if not exists donations (
donationID int primary key auto_increment ,
donor_name varchar(100) ,
donation_type varchar(50) ,
 donation_amount decimal(10,2) ,
 donation_item varchar (100) ,
 donation_date date DEFAULT (CURRENT_DATE),
 shelterid int ,
 foreign key (shelterid) references shelters(shelterid) on delete cascade);

CREATE TABLE if not exists AdoptionEvents (
    EventID INT PRIMARY KEY AUTO_INCREMENT,
    EventName VARCHAR(100),
    EventDate DATETIME,
    Location VARCHAR(255)
);

CREATE TABLE if not exists  Participants (
    ParticipantID INT PRIMARY KEY AUTO_INCREMENT,
    ParticipantName VARCHAR(100),
    ParticipantType VARCHAR(50),
    EventID INT,
   FOREIGN KEY (EventID) REFERENCES AdoptionEvents(EventID) on delete cascade
);
```

INSERT VALUES

```
insert into  Pets (Name, Age, Breed, Type, AvailableForAdoption) values
('Kutty', 2, 'Indian Spitz', 'Dog', 1),
('Muthu', 1, 'Siamese', 'Cat', 1),
('Selvi', 3, 'Rajapalayam', 'Dog', 0),
('Appu', 4, 'Persian', 'Cat', 1),
('Raja', 5, 'Labrador', 'Dog', 1),
('Meena', 1, 'Maine Coon', 'Cat', 1),
('Bala', 2, 'Beagle', 'Dog', 0),
('Rani', 3, 'Bengal Cat', 'Cat', 1),
('shru', 4, 'Dachshund', 'Dog', 1),
('viji', 5, 'Indian Mix', 'Dog', 0);

insert into Shelters (Name, Location) values
('Anbu Shelter', 'Chennai'),
('companion', 'Madurai'),
('happy Paws', 'Coimbatore'),
('green paws', 'Tiruchirapalli'),
('Velam VetCare', 'Salem'),
('Iraivan Trust', 'Erode'),
('Thozhan Tails', 'Vellore'),
('MeowMani', 'Tirunelveli'),
('Dog Nilayam', 'Thoothukudi'),
('Karunai Nest', 'Nagercoil');

INSERT INTO Donations (Donor_Name, Donation_Type, Donation_Amount, Donation_Item,
Donation_Date, ShelterID) VALUES
('Kannan', 'Cash', 500.00, NULL, '2024-03-02', 1),
('Revathi', 'Item', NULL, 'Cat Food', '2022-04-02', 2),
('Suresh', 'Cash', 800.00, NULL, '2024-01-18', 3),
('Lakshmi', 'Item', NULL, 'Dog Toys', '2025-01-24', 4),
('Arun', 'Cash', 1000.00, NULL, '2025-02-07', 5),
('Gayathri', 'Item', NULL, 'Blankets','2025-04-02', 6),
('Ravi', 'Cash', 250.00, NULL, '2024-04-17', 7),
('Bhavani', 'Item', NULL, 'Pet Shampoo', '2022-12-18', 8),
('Saravanan', 'Cash', 700.00, NULL,'2024-12-12', 9),
('Uma', 'Item', NULL, 'Leashes', '2025-01-02', 10);



INSERT INTO AdoptionEvents (EventName, EventDate, Location) VALUES
('Puthandu Pet Fest', '2025-04-14 10:00:00', ‘Chennai'),
('Madurai Meow Mela', '2025-05-01 11:00:00', 'Madurai'),
('Coimbatore Canine Carnival', '2025-06-10 10:30:00', 'Coimbatore'),
('Tiruchi Tails Meet', '2025-07-15 15:00:00', 'Tiruchirapalli'),
('Salem Street Paws', '2025-08-12 14:00:00', 'Salem'),
('Erode Animal Day', '2025-09-05 09:00:00', 'Erode'),
('Vellore Vet Fest', '2025-10-11 13:00:00', 'Vellore'),
('Tirunelveli Tailathon', '2025-11-18 10:00:00', 'Tirunelveli'),
('Tuticorin Pet Parade', '2025-12-20 16:00:00', 'Thoothukudi'),
('Kanyakumari Kindness Day', '2026-01-26 08:00:00', 'Nagercoil');

INSERT INTO Participants (ParticipantName, ParticipantType, EventID) VALUES
('Anbu Shelter', 'Shelter', 1),
('Meena Kumari', 'Adopter', 1),
('Pasumai Paws', 'Shelter', 2),
('Thiyagu', 'Adopter', 2),
('Velan VetCare', 'Shelter', 3),
('Jaya', 'Adopter', 3),
('Thozhan Tails', 'Shelter', 4),
('Baskar', 'Adopter', 4),
('Naai Nilayam', 'Shelter', 5),
('Devi', 'Adopter', 5);

select * from pets;
select * from donations;
select * from shelters;
select * from adoptionevents;
select * from participants;
```

3)

```
1)participantId INT PRIMARY KEY
2)eventId INT PRIMARY KEY AUTO
3) petId INT PRIMARY KEY
4)FOREIGN KEY (eventId) REFERENCES adoption_events(eventIid)
5) donation_id INT PRIMARY KEY
6)FOREIGN KEY (shelterid) REFERENCES shelters(shelterid)
```

4) if not exists condition is given in the table creation itself

5)

```
select name , age , breed , type , availableforadoption from pets where
availableForAdoption=1;
```

6) 2 ways

```
SELECT participantname, participanttype FROM participants WHERE eventid = 1;

select p.participantname , p.participanttype , a.eventname from participants p join
adoptionevents a using(eventid) where eventid=1;
```

7)

MySQL CODING CHALLENGE

```
delimiter //
create procedure updateshelterinfo(
   in shelterid int,
   in newname varchar(100),
   in newlocation varchar(100)
)
begin
   update shelters
   set name = newname,
      location = newlocation
   where shelterid = shelterid;
end //
delimiter ;

UPDATE shelters SET name = 'new pet home', location = 'chennai' WHERE shelterid = 1;
select * from shelters;
```

8)

```
SELECT s.shelterid, s.name AS shelter_name, SUM(d.donation_amount) AS
total_donation_amount  FROM shelters s
LEFT JOIN donations d ON s.shelterid = d.shelterid GROUP BY s.shelterid;
```

9) add a column owner_id in the pets table and then retrieve the owner_id which is null

```
ALTER TABLE Pets ADD COLUMN OwnerID INT;
update pets set ownerid = 1 where name = 'kutty';
update pets set ownerid = null where name = 'muthu';
update pets set ownerid = 2 where name = 'selvi';
update pets set ownerid = 3 where name = 'appu';
update pets set ownerid = null where name = 'raja';
update pets set ownerid = 4 where name = 'meena';
update pets set ownerid = 5 where name = 'bala';
update pets set ownerid = null where name = 'rani';
update pets set ownerid = 6 where name = 'shru';
update pets set ownerid = null where name = 'viji';
select * from pets;

select name , age , breed , type from pets where ownerid is null;
```

10)

```
SELECT donation_date AS month_year,SUM(donation_amount) AS total_donation_amount
FROM donations GROUP BY month_year ORDER BY month_year;
```

11)

```
select distinct breed , age from pets where age between 1 and 3 or age > 5;
```

12)

MySQL CODING CHALLENGE

```
update pets set shelterid = 1 where name = 'kutty';
update pets set shelterid = 2 where name = 'muthu';
update pets set shelterid = 3 where name = 'selvi';
update pets set shelterid = 4 where name = 'appu';
update pets set shelterid = 5 where name = 'raja';
update pets set shelterid = 6 where name = 'meena';
update pets set shelterid = 7 where name = 'bala';
update pets set shelterid = 8 where name = 'rani';
update pets set shelterid = 9 where name = 'shru';
update pets set shelterid = 10 where name = 'viji';

select * from pets;
select * from shelters;

SELECT p.name AS petname, s.name AS sheltername FROM pets p
JOIN shelters s ON p.shelterid = s.shelterid WHERE p.availableforadoption = TRUE;
```

13)

```
SELECT COUNT(participantid) AS total_participants FROM participants WHERE eventid IN
(SELECT eventid FROM adoptionevents WHERE location IN ( SELECT location FROM shelters
WHERE location = 'Chennai'));
```

14)

```
SELECT DISTINCT breed FROM pets WHERE age BETWEEN 1 AND 5;
```

15)

```
SELECT * FROM pets WHERE availableforadoption = TRUE;
```

16)

```
SELECT name, age, breed, ownerid from pets where ownerid is NOT NULL;
```

17)

```
SELECT s.shelterid, s.name AS sheltername,(SELECT COUNT(*) FROM pets p
WHERE p.shelterid = s.shelterid AND p.availableforadoption = TRUE) AS availablepetscount
FROM shelters s;
```

18) as we dont have more than 2 . i choosed more than 1

```
SELECT breed, shelterid, COUNT(*) AS total_pets FROM pets GROUP BY breed, shelterid
HAVING total_pets >= 1;
```

19)

```
SELECT s.shelterid, s.name AS sheltername, e.eventid, e.eventname FROM shelters s
```

```
LEFT JOIN adoptionevents e ON s.location = e.location;
```

20)

```
 SELECT * FROM shelters
 WHERE shelterid = ( SELECT shelterid FROM pets WHERE availableforadoption = FALSE
GROUP BY shelterid ORDER BY COUNT(*) DESC LIMIT 1);
```