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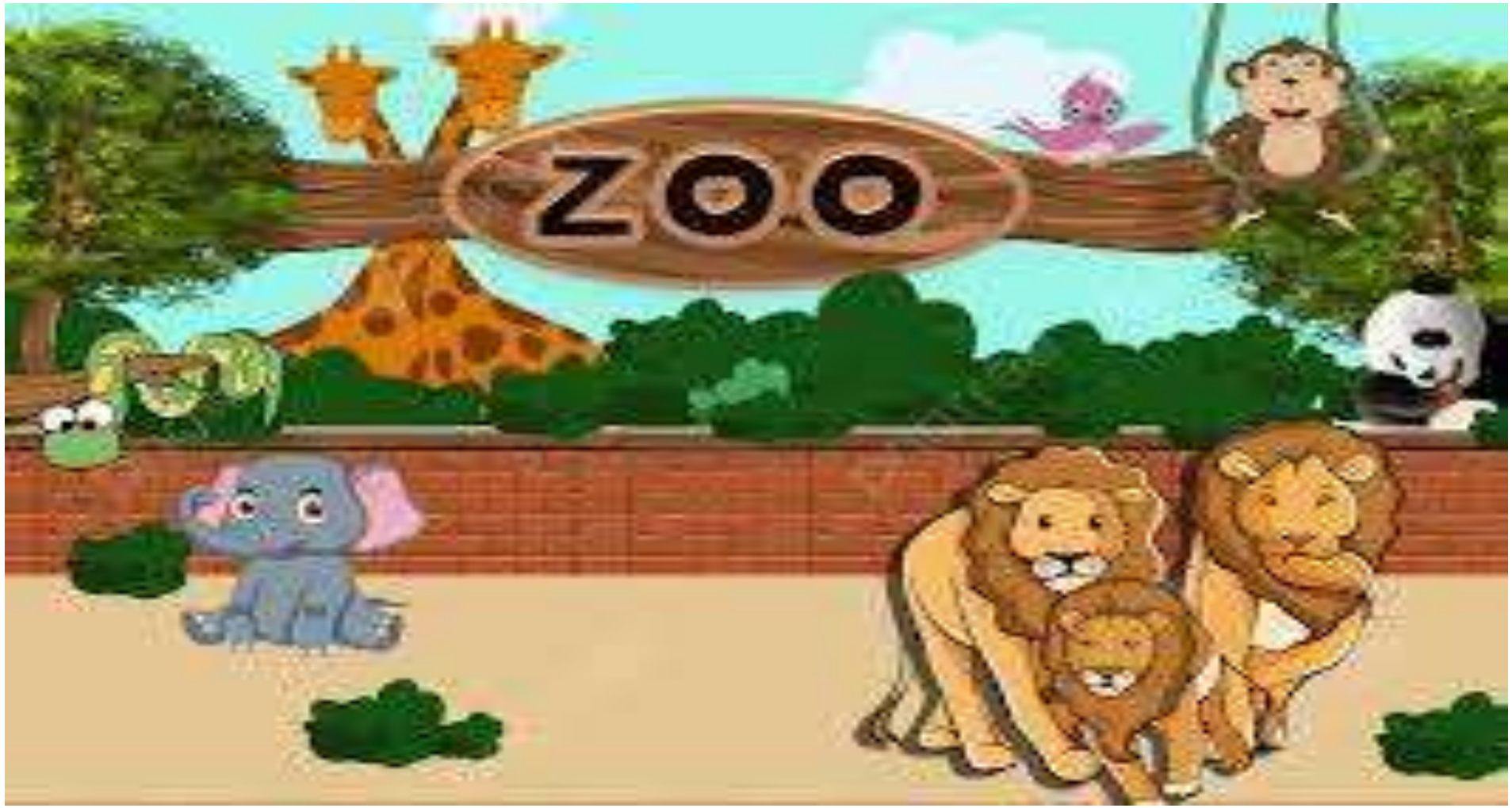
INTRODUCTION

- **Project Focus : Organizing the Data in the Zoo**
- **Primary Purpose of Design the Database**
  - **Get the Schedule for the Keepers**
  - **Track on the Visitors**
  - **Sending Thank You Note to Visitors**
  - **Many other Minor and Major Queries of the Zoo Management**

Create Database Zoo



Create Tables within the Zoo Database

```
//Table for Animals//
CREATE TABLE Animals (
Animal_ID INT PRIMARY KEY,
Animal_Name VARCHAR(100),
Species VARCHAR(100),
Age INT,
Care_Time TIME);
```

```
//Table for Enclosure//
CREATE TABLE Enclosures (
Enclosure_ID INT PRIMARY KEY,
Enclosure_Name VARCHAR(100),
Capacity INT);
```

```
//Table for Keepers//
CREATE TABLE Keepers (
Keeper_ID INT PRIMARY KEY,
Keeper_Name VARCHAR(100),
Contact_Number VARCHAR(20),
Salary DECIMAL(10, 2),
Hire_Date DATE);
```

```
//Table for Visitors//
CREATE TABLE VISITORS(
Visitor_ID INT PRIMARY KEY,
Visitor_Name VARCHAR(50),
Contact_Number VARCHAR(20));
```

Inserting the Values into Tables

- INSERT INTO Animals (Animal_ID, Animal_Name, Species, Age, Care_Time)
  VALUES (1, ‘Lion’, ‘Simba’, 8, ’06:00:25’),
  (2, ‘Elephant’, ‘Ellie’, 10, ’07:10:56’);
- INSERT INTO Enclosures (Enclosure_ID, Enclosure_Name, Capacity)
  VALUES (1, ‘Lion Enclosure’, 10),
  (2, ‘Elephant Enclosure’, 5);
- INSERT INTO keepers (Keeper_ID, Keeper_Name, Contact_Number, Salary, Hire_Date)
  VALUES (1, ‘John Doe’, ‘9876547898’, 5000, ‘2021-01-12’),
  (2, ‘Jane Smith’, ‘8889765465’, 6000, ‘2021-01-17’);
- INSERT INTO Visitors (Visitor_ID, Visitor_Name, Contact_Number)
  VALUES (101, ‘Dhanush’, ‘8976765556’),
  (102, ‘Sandhya’, ‘9764387657’);

Altering the Animals Table to Add a New Column

```
ALTER TABLE Animals ADD COLUMN Gender VARCHAR(10);
```

Animal_ID	Animal_Name	Species	Age	Care_Time	Gender
1	Lion	Simba	8	06:00:25	Female
2	Elephant	Ellie	10	07:10:56	Male

Delete the Specific Visitor Record by Visitor ID

```
DELETE FROM Visitors WHERE Visitor_ID = 101;
```

Visitor_ID	Visitor_Name	Contact_Number
102	Sandhya	9764387657

Update the Capacity of an Enclosure

```
UPDATE Enclosures SET Capacity =4 WHERE Enclosure_ID = 2;
```

Enclosure_ID	Enclosure_Name	Capacity
1	Lion Enclosure	10
2	Elephant Enclosure	4

Calculate Age of the Animals in the Zoo

```
SELECT Animal_Name, DATE_DIFF(CURRENT_DATE(), Birth_Date,
Year) AS Age FROM Animals;
```

Animal_Name	Age
Lion	15
Elephant	12

Animals Need Feeding after 6 AM

```
SELECT Animal_Name, Care_Time FROM Animals WHERE Animal_ID
IN (SELECT Animal_ID FROM AnimalFeeding WHERE Feeding_Time>
'06:00:00');
```

Animal_ID	Animal_Name	Care Time
1	Lion	6:00:25
2	Elephant	7:10:56

Display Visitors Whose Name Starts with “S” or “P”

```
SELECT * FROM Visitors  WHERE Visitor_Name LIKE ‘S%’ OR Visitor_Name
LIKE ‘P%’;
```

Visitor_ID	Visitor_Name	Contact_Number
102	Sandhya	9764387657

Animal Species that have an Average Age Greater than or Equal to 5 Years

```
SELECT Species, AVG(Age) AS Avg_Age FROM Animals GROUP BY
Species HAVING AVG(Age) >= 5;
```

Species	Avg_Age
Simba	8
Ellie	10

Which Animal is Popular for Adoption

```
SELECT Species FROM Adoption ORDER BY Adoption_Count DESC
LIMIT 1;
```

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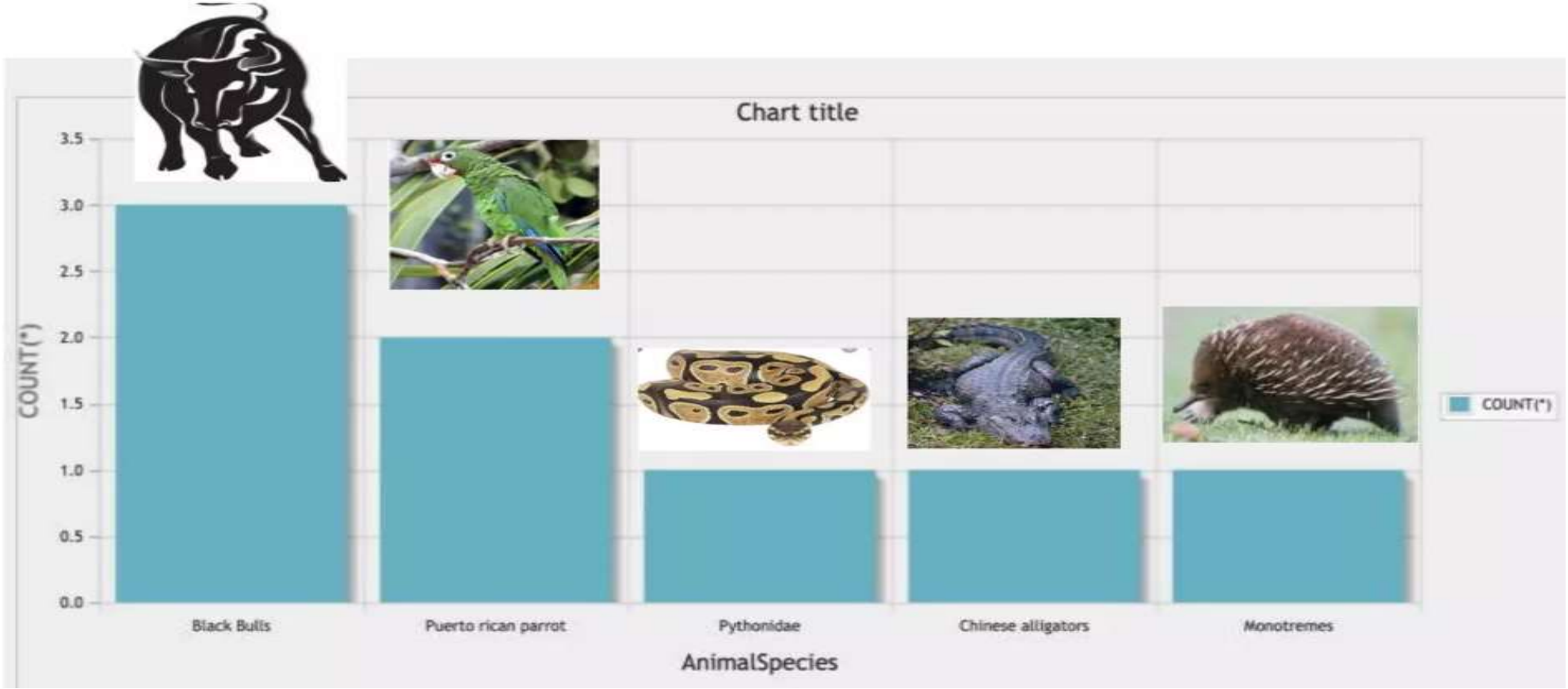

Details of Visitors who have Purchased Tickets

```
SELECT Visitors.Visitor_ID, Visitors.Visitor_Name, Tickets.Ticket_ID
FROM Visitors JOIN Tickets ON Visitors.Visitor_ID = Tickets.Visitor_ID;
```

Visitor_ID	Name	Ticket_ID
1	John	101
2	Emily	102
3	Robert	103
4	Sarah	104

Animals Housed in Enclosures with a Capacity Greater than the Average Capacity of all Enclosure

```
SELECT Animal_Name FROM Animals WHERE Enclosure_ID IN (SELECT
 Enclosure_ID FROM Enclosures WHERE Capacity > (SELECT AVG
 (Capacity) FROM Enclosures));
```

Animal_Name
Lion
Elephant

Update All Visitors with a "Thank You" Message

UPDATE Visitors SET Thank_You_Message = '***Thank You, (Visitor_Name), for Visiting our Zoo!***'


THANK YOU