CREATE DATABASE VisitorManagement;

USE VisitorManagement;

CREATE TABLE LOCATION (

LOCATIONID INT PRIMARY KEY,

LOCATIONName VARCHAR(100) NOT NULL

);

INSERT INTO LOCATION VALUES

(1,'Delhi'),

(2,'Araku'),

(3,'Manali'),

(4,'chennai'),

(5,'Hyderabad'),

(6,'bangalore'),

(7,'Paris'),

(8,'Pune'),

(9,'Punjab'),

(10,'Nagar');

SELECT \* FROM LOCATION;

CREATE TABLE HOST (

HostID INT AUTO\_INCREMENT PRIMARY KEY,

HostName VARCHAR(100) NOT NULL,

EmployeeNumber VARCHAR(50) UNIQUE NOT NULL,

Department VARCHAR(100),

LocationID INT,

ContactNumber VARCHAR(20),

FOREIGN KEY (LocationID)

REFERENCES Location(LocationID)

ON DELETE CASCADE

ON UPDATE CASCADE

);

INSERT INTO Host VALUES

(10,'Vamsi',001,'IT',1,'1234'),

(20,'krishna',002,'NON-IT',2,'2343'),

(30,'Sukumar',003,'IT',3,'6543'),

(40,'sai',004,'HR',10,'1333'),

(50,'Varun',005,'FINANCE',4,'7764'),

(60,'venkat',006,'FINANCE',6,'8077'),

(70,'raidu',007,'SUPPORT',5,'6493'),

(80,'Nanda',008,'HR',7,'6524'),

(90,'Aditya',009,'IT',8,'1987'),

(100,'Shakti',010,'IT',9,'6793');

SELECT \* FROM Host;

CREATE TABLE Visitor (

VisitorID INT AUTO\_INCREMENT PRIMARY KEY,

Name VARCHAR(100) NOT NULL,

LocationID INT,

ParentCompany VARCHAR(100),

Purpose VARCHAR(255),

MobileNumber VARCHAR(20),

VisitingDate DATE,

HostID INT,

FOREIGN KEY (HostID)

REFERENCES Host(HostID)

ON DELETE CASCADE

ON UPDATE CASCADE,

FOREIGN KEY (LocationID)

REFERENCES Location(LocationID)

ON DELETE CASCADE

ON UPDATE CASCADE

);

INSERT INTO Visitor VALUES

(101,'Stark',2,'Grok','Meeting',4561,'2024-04-21',10),

(102,'Thor',3,'Idp','Training',3333,'2024-06-05',20),

(103,'Strange',5,'Barclay','Technical',111,'2024-04-06',30),

(104,'Hulk',6,'Boeing','Training',2222,'2024-05-07',40),

(105,'Vanda',7,'Foodhub','Audit',5555,'2024-05-09',50),

(106,'Panther',9,'Mphasis','Interview',6666,'2024-03-09',60),

(107,'Thala',10,'Accenture','Audit',7777,'2024-07-07',70),

(108,'Thalapathy',1,'Codeiox','ProjectPlan',8888,'2024-01-04',80),

(109,'Vijay',5,'Mitsogo','Interview',9999,'2024-02-05',90),

(110,'Sanjoy',6,'CorroHealth','Discussion',4444,'2024-04-05',100);

SELECT \* FROM Visitor;

SELECT LOCATIONName FROM LOCATION;

SELECT

Location.LocationName,

Visitor.Name AS VisitorName,

Visitor.VisitingDate

FROM

Visitor

INNER JOIN

Location ON Visitor.LocationID = Location.LocationID

ORDER BY

Location.LocationName;

SELECT LocationName

FROM Location

WHERE LocationName LIKE '%bad';

SELECT COUNT(\*) AS TotalHosts

FROM Host;

SELECT COUNT(\*) AS NumberOfHosts

FROM Host

WHERE LocationID = 6;

SELECT v.\*

FROM Visitor V

JOIN Host H ON V.HostID = H.HostID

WHERE H.HostName = 'Sukumar';

SELECT \*

FROM Visitor

WHERE VisitingDate = '2024-04-06';

SELECT \*

FROM Visitor

WHERE HostID IS NULL;

SELECT V.\*

FROM Visitor V

JOIN Host H ON V.HostID = H.HostID

WHERE H.Department = 'IT';

SELECT HostID, AVG(VisitorCount) AS AverageVisitors

FROM (

SELECT HostID, COUNT(\*) AS VisitorCount

FROM Visitor

WHERE HostID = 5 AND VisitingDate = '2024-04-06'

GROUP BY HostID, VisitingDate

) AS SubQuery

GROUP BY HostID;

SELECT LocationID, AVG(VisitorCount) AS AverageVisitors

FROM (

SELECT LocationID, COUNT(\*) AS VisitorCount

FROM Visitor

WHERE LocationID = 5 AND VisitingDate = '2024-04-06'

GROUP BY LocationID, VisitingDate

) AS SubQuery

GROUP BY LocationID;

SELECT V.\*

FROM Visitor V

WHERE V.HostID = (

SELECT HostID

FROM Visitor

GROUP BY HostID

ORDER BY COUNT(\*) DESC

LIMIT 1

);

SELECT H.\*

FROM Host H

WHERE H.HostID = (

SELECT HostID

FROM Visitor

GROUP BY HostID

ORDER BY COUNT(\*) ASC

LIMIT 1

);

SELECT H.\*

FROM Host H

LEFT JOIN Visitor V ON H.HostID = V.HostID

WHERE V.HostID IS NULL;

SELECT VisitingDate, COUNT(\*) AS VisitorCount

FROM Visitor

GROUP BY VisitingDate

ORDER BY VisitingDate;

SELECT V.\*

FROM Visitor V

WHERE V.HostID = 6 AND V.VisitingDate BETWEEN '2024-04-06' AND '2024-05-07';

SELECT \*

FROM Host

WHERE Role != 'Manager' OR Role IS NULL;

SELECT \*

FROM Visitor

WHERE MobileNumber IS NULL OR MobileNumber = '';