

The list of SQL codes :-

-- Employee Table

```
CREATE TABLE Employee (  
  ID INT PRIMARY KEY,  
  StartDate DATE,  
  JobType VARCHAR(255),  
  First VARCHAR(255),  
  Mini CHAR(1),  
  Last VARCHAR(255),  
  Street VARCHAR(255),  
  City VARCHAR(255),  
  State VARCHAR(255),  
  Zip VARCHAR(10),  
  e_id INT,  
  SupervisorID INT,  
  HoursWorkedPerWeek INT DEFAULT 40,  
  FOREIGN KEY (SupervisorID) REFERENCES Employee(ID),  
  FOREIGN KEY (e_id) REFERENCES HourlyRate(ID)  
);
```

-- HourlyRate, Species, Animal, Building, RevenueTypes, ZooAdmission,
-- Concession, AnimalShow, RevenueEvents, Enclosure tables are the same as in the second code.

```
CREATE TABLE HourlyRate (  
  ID INT PRIMARY KEY,  
  Rate DECIMAL(10, 2)  
);
```

-- Species Table

```
CREATE TABLE Species (  
  SpeciesID INT PRIMARY KEY,  
  Name VARCHAR(255),  
  FoodCost DECIMAL(10, 2)  
);
```

-- Animal Table

```
CREATE TABLE Animal (  
  AID INT PRIMARY KEY,
```

```

Status VARCHAR(255),
BirthYear INT,
FoodCost DECIMAL(10, 2),
SpeciesID INT,
BuildingID INT,
FOREIGN KEY
(SpeciesID)
REFERENCES
Species(SpeciesID),
FOREIGN KEY (BuildingID) REFERENCES Building(BuildingID)
);

```

-- Building Table

```

CREATE TABLE Building (
    BuildingID INT PRIMARY KEY,
    Name VARCHAR(255),
    Type VARCHAR(255)
);

```

-- RevenueTypes Table

```

CREATE TABLE RevenueTypes (
    RevenueID INT PRIMARY KEY,
    Name VARCHAR(255),
    Type VARCHAR(255),
    BuildingID INT,
    FOREIGN KEY (BuildingID) REFERENCES Building(BuildingID)
);

```

-- ZooAdmission Table

```

CREATE TABLE ZooAdmission (
    RevenueID INT,
    SeniorPrice DECIMAL(10, 2),
    AdultPrice DECIMAL(10, 2),
    KidsPrice DECIMAL(10, 2),
    PRIMARY KEY (RevenueID),
    FOREIGN KEY (RevenueID) REFERENCES RevenueTypes(RevenueID)
);

```

-- Concession Table

```

CREATE TABLE Concession (
    RevenueID INT,

```

```
Product VARCHAR(255),  
PRIMARY KEY (RevenueID),  
FOREIGN KEY (RevenueID) REFERENCES RevenueTypes(RevenueID)  
);
```

```
-- ParticipatesIn (Associative Table between Species and RevenueTypes)  
CREATE TABLE ParticipatesIn (  
    SpeciesID INT,  
    RevenueID INT,  
    PRIMARY KEY (SpeciesID, RevenueID),  
    FOREIGN KEY (SpeciesID) REFERENCES Species(SpeciesID),  
    FOREIGN KEY (RevenueID) REFERENCES RevenueTypes(RevenueID)  
);
```

```
-- AnimalShow Table  
CREATE TABLE AnimalShow (  
    RevenueID INT,  
    SeniorPrice DECIMAL(10, 2),  
    AdultPrice DECIMAL(10, 2),  
    KidsPrice DECIMAL(10, 2),  
    ShowsPerDay INT,  
    PRIMARY KEY (RevenueID),  
    FOREIGN KEY (RevenueID) REFERENCES RevenueTypes(RevenueID)  
);
```

```
-- RevenueEvents Table  
CREATE TABLE RevenueEvents (  
    Date_Time DATETIME,  
    Revenue DECIMAL(10, 2),  
    TicketsSold INT,  
    RevenueID INT,  
    PRIMARY KEY (Date_Time),  
    FOREIGN KEY (RevenueID) REFERENCES RevenueTypes(RevenueID)  
);
```

```
-- Enclosure Table  
CREATE TABLE Enclosure (  
    BuildingID INT,  
    SqFt DECIMAL(10, 2),  
    EnclosureID INT PRIMARY KEY,
```

```
FOREIGN KEY (BuildingID) REFERENCES Building(BuildingID)
);
```

```
-- Veterinarian Table (inherits from Employee)
CREATE TABLE Veterinarian (
    EmployeeID INT PRIMARY KEY,
    LicenseNumber VARCHAR(255),
    FOREIGN KEY (EmployeeID) REFERENCES Employee(ID)
);
```

```
-- AnimalCareSpecialist Table (inherits from Employee)
CREATE TABLE AnimalCareSpecialist (
    EmployeeID INT PRIMARY KEY,
    Certification VARCHAR(255),
    FOREIGN KEY (EmployeeID) REFERENCES Employee(ID)
);
```

```
-- Maintenance Table (inherits from Employee)
CREATE TABLE Maintenance (
    EmployeeID INT PRIMARY KEY,
    FOREIGN KEY (EmployeeID) REFERENCES Employee(ID)
);
```

```
-- CustomerService Table (inherits from Employee)
CREATE TABLE CustomerService (
    EmployeeID INT PRIMARY KEY,
    FOREIGN KEY (EmployeeID) REFERENCES Employee(ID)
);
```

```
-- TicketSeller Table (inherits from Employee)
CREATE TABLE TicketSeller (
    EmployeeID INT PRIMARY KEY,
    BoothNumber INT,
    FOREIGN KEY (EmployeeID) REFERENCES Employee(ID)
);
```

```
-- Associative table for Animal and Veterinarian
CREATE TABLE VeterinarianAnimal (
    VeterinarianID INT,
```

```

AnimalID INT,
PRIMARY KEY (VeterinarianID, AnimalID),
FOREIGN KEY (VeterinarianID) REFERENCES Veterinarian(EmployeelID),
FOREIGN KEY (AnimalID) REFERENCES Animal(AID)
);

```

```

-- Associative table for Animal and AnimalCareSpecialist
CREATE TABLE AnimalCareSpecialistAnimal (
    AnimalCareSpecialistID INT,
    AnimalID INT,
    PRIMARY KEY (AnimalCareSpecialistID, AnimalID),
    FOREIGN KEY (AnimalCareSpecialistID) REFERENCES
AnimalCareSpecialist(EmployeelID),
    FOREIGN KEY (AnimalID) REFERENCES Animal(AID)
);

```

```

-- CaresFor and ParticipatesIn tables are the same as in the second code.
-- Additional modification to the RevenueEvents table
ALTER TABLE RevenueEvents ADD EventDate DATE;
UPDATE RevenueEvents SET EventDate = DATE(Date_Time);

```

```

-- Attendance Table
CREATE TABLE Attendance (
    EventDate DATE,
    AttendeeType VARCHAR(255),
    NumberAttendees INT,
    Revenue DECIMAL(10, 2),
    PRIMARY KEY (EventDate, AttendeeType)
);

```

```

INSERT INTO Employee (ID, StartDate, JobType, First, Mini, Last,
Street, City, State, Zip, e_id, SupervisorID)
VALUES
    (1, '2020-01-15', 'Manager', 'John', 'M', 'Doe', '123 Main St',
'Cityville', 'CA', '12345', 1, NULL),
    (2, '2019-05-20', 'Zookeeper', 'Jane', 'A', 'Smith', '456 Oak
St',

```

```

'Townsville', 'NY', '67890', 2, 1),
  (3, '2021-03-10', 'Veterinarian', 'Robert', 'J', 'Johnson', '789
Pine St', 'Villagetown', 'TX', '23456', 3, 1),
  (4, '2018-08-05', 'Animal Care Specialist', 'Emily', 'R',
'Williams', '101 Cedar St', 'Hamletville', 'FL', '34567', 4, 2),
  (5, '2022-02-28', 'Maintenance', 'Michael', 'S', 'Davis', '202
Elm
St', 'Cityburg', 'IL', '45678', 5, NULL),
  (6, '2020-11-15', 'Animal Care Specialist', 'Sophia', 'L',
'Jones',
'303 Birch St', 'Villageburg', 'OH', '56789', 1, 2),
  (7, '2017-07-01', 'Maintenance', 'William', 'H', 'Clark', '404
Maple St', 'Townton', 'WA', '67891', 2, NULL),
  (8, '2019-12-10', 'Maintenance', 'Olivia', 'K', 'Miller', '505
Pine
St', 'Citytown', 'CA', '78901', 3, NULL),
  (9, '2020-09-22', 'Maintenance', 'James', 'P', 'Brown', '606 Oak
St', 'Villeburg', 'NY', '89012', 4, NULL),
  (10, '2018-04-18', 'Customer Service', 'Emma', 'N', 'Wilson',
'707
Cedar St', 'Villageville', 'TX', '90123', 5, 1),
  (11, '2022-06-30', 'Ticket Seller', 'Daniel', 'E', 'White', '808
Elm St', 'Hamletville', 'FL', '12345', 1, 1),
  (12, '2019-10-05', 'Customer Service', 'Ava', 'F', 'Taylor', '909
Birch St', 'Cityville', 'IL', '23456', 2, 1),
  (13, '2021-01-08', 'Ticket Seller', 'Logan', 'C', 'Anderson',
'121
Main St', 'Townsville', 'WA', '34567', 3, 11),
  (14, '2017-03-25', 'Ticket Seller', 'Grace', 'B', 'Harris', '232
Oak St', 'Villagetown', 'OH', '45678', 4, 11),
  (15, '2022-08-14', 'Ticket Seller', 'Jackson', 'W', 'Martin',
'343
Pine St', 'Villageburg', 'CA', '56789', 5, 11);

```

-- HourlyRate

INSERT INTO HourlyRate (ID, Rate) VALUES

(1, 20.00), (2, 22.00), (3, 25.00), (4, 18.50), (5, 30.00);

-- Species

INSERT INTO Species (SpeciesID, Name, FoodCost) VALUES

(1, 'Lion', 50.00), (2, 'Tiger', 45.00), (3, 'Elephant', 60.00), (4, 'Giraffe', 40.00), (5, 'Penguin', 30.00);

-- Animal

INSERT INTO Animal (AID, Status, BirthYear, SpeciesID, BuildingID, FoodCost) VALUES

(1, 'Healthy', 2015, 1, 1, 100), (2, 'Sick', 2016, 2, 2, 120.5), (3, 'Healthy', 2017, 3, 3, 90), (4, 'Healthy', 2018, 4, 4, 110.25, 80.75), (5, 'Injured', 2019, 5, 5);

-- Building

INSERT INTO Building (BuildingID, Name, Type) VALUES

(1, 'Lion House', 'Enclosure'), (2, 'Tiger Den', 'Enclosure'), (3, 'Elephant Area', 'Open Space'), (4, 'Giraffe Tower', 'Enclosure'), (5, 'Penguin Pool', 'Aquatic Area');

-- RevenueTypes

INSERT INTO RevenueTypes (RevenueID, Name, Type, BuildingID) VALUES

(1, 'Entry Fees', 'Admission', NULL), (2, 'Safari Tour', 'Attraction', NULL), (3, 'Night Camping', 'Activity', NULL), (4, 'Gift Shop', 'Merchandise', NULL), (5, 'Food Court', 'Concession', NULL);

-- ZooAdmission

INSERT INTO ZooAdmission (RevenueID, SeniorPrice, AdultPrice, KidsPrice) VALUES

(1, 10.00, 15.00, 8.00), (2, 9.00, 14.00, 7.00), (3, 11.00, 16.00, 9.00), (4, 12.00, 17.00, 10.00), (5, 13.00, 18.00, 11.00);

-- Concession

INSERT INTO Concession (RevenueID, Product, AdultPrice, ChildPrice) VALUES

(1, 'Ice Cream', 2.00, 1.50), (2, 'Hot Dogs', 3.00, 2.00), (3, 'Souvenirs', 10.00, 7.00), (4, 'Beverages', 1.50, 1.00), (5, 'Sandwiches', 4.00, 3.00);

-- AnimalShow

INSERT INTO AnimalShow (RevenueID, ShowsPerDay, AdultPrice, KidsPrice, SeniorPrice) VALUES

(1, 1, 20.00, 10.00, 15.00), (2, 1, 18.00, 9.00, 14.00), (3, 1, 22.00, 11.00, 16.00), (4, 1, 19.00, 9.50, 14.50), (5, 1, 17.00, 8.50, 13.00);

INSERT INTO RevenueEvents (RevenueID, Date_Time, EventDate, Revenue, TicketsSold) VALUES

(1, '2023-01-01 10:00:00', '2023-01-01', 1000.00, 100),

```
(2, '2023-01-02 10:00:00', '2023-01-02', 1200.00, 120),  
(3, '2023-01-03 10:00:00', '2023-01-03', 900.00, 90),  
(4, '2023-01-04 10:00:00', '2023-01-04', 1300.00, 130),  
(5, '2023-01-05 10:00:00', '2023-01-05', 800.00, 80);
```

##-- Enclosure

```
INSERT INTO Enclosure (EnclosureID, SqFt, BuildingID) VALUES  
(1, 2000.00, 1), (2, 1500.00, 2), (3, 3000.00, 4), (4, 1800.00, 1), (5, 2500.00, 4);
```

-- Attendance Table

```
INSERT INTO Attendance (EventDate, AttendeeType, NumberAttendees, Revenue) VALUES  
( '2023-01-01', 'Adult', 200, 4000), ('2023-01-01', 'Child', 150, 3000), ('2023-01-01', 'Senior', 100,  
2000), ('2023-01-02', 'Adult', 180, 3600), ('2023-01-02', 'Child', 120, 2400);
```

-- ParticipatesIn

```
INSERT INTO ParticipatesIn (SpeciesID, RevenueID) VALUES  
(1, 1), (2, 2), (3, 3), (4, 4), (5, 5);
```

-- Veterinarian (Assuming IDs 3, 6, 9 are Veterinarians)

```
INSERT INTO Veterinarian (EmployeeID, LicenseNumber) VALUES  
(3, 'Lic001'), (6, 'Lic002'), (9, 'Lic003');
```

-- AnimalCareSpecialist (Assuming IDs 4, 6 are Animal Care Specialists)

```
INSERT INTO AnimalCareSpecialist (EmployeeID, Certification) VALUES  
(4, 'Cert001'), (6, 'Cert002');
```

-- Maintenance (Assuming IDs 5, 7, 8, 9 are in Maintenance)

```
INSERT INTO Maintenance (EmployeeID) VALUES  
(5), (7), (8), (9);
```

-- CustomerService (Assuming IDs 10, 12 are in Customer Service)

```
INSERT INTO CustomerService (EmployeeID) VALUES  
(10), (12);
```

-- TicketSeller (Assuming IDs 11, 13, 14, 15 are Ticket Sellers)

```
INSERT INTO TicketSeller (EmployeeID, BoothNumber) VALUES  
(11, 1), (13, 2), (14, 3), (15, 4);
```

-- VeterinarianAnimal (Example entries, assuming relevant Animal IDs)


```
INSERT INTO VeterinarianAnimal (VeterinarianID, AnimalID) VALUES  
(3, 1), (6, 2), (9, 3);
```

```
-- AnimalCareSpecialistAnimal (Example entries, assuming relevant Animal IDs)
```

```
INSERT INTO AnimalCareSpecialistAnimal (AnimalCareSpecialistID, AnimalID) VALUES  
(4, 1), (6, 2);
```