CREATE DATABASE RMS;

USE RMS;

CREATE TABLE Train (

TrainID INT PRIMARY KEY,

TrainName VARCHAR(255),

MaxCapacity INT,

Speed INT,

Type VARCHAR(50)

);

CREATE TABLE Station (

StationID INT PRIMARY KEY,

StationName VARCHAR(255),

Location VARCHAR(255),

Capacity INT

);

CREATE TABLE Route (

RouteID INT PRIMARY KEY,

SourceStationID INT,

DestinationStationID INT,

Distance INT,

Duration INT,

FOREIGN KEY (SourceStationID) REFERENCES Station(StationID),

FOREIGN KEY (DestinationStationID) REFERENCES Station(StationID)

);

CREATE TABLE Ticket (

TicketID INT PRIMARY KEY,

PassengerName VARCHAR(255),

TrainID INT,

SourceStationID INT,

DestinationStationID INT,

SeatNumber VARCHAR(10),

Fare DECIMAL(10, 2),

BookingDate DATE,

FOREIGN KEY (TrainID) REFERENCES Train(TrainID),

FOREIGN KEY (SourceStationID) REFERENCES Station(StationID),

FOREIGN KEY (DestinationStationID) REFERENCES Station(StationID)

);

CREATE TABLE Schedule (

ScheduleID INT PRIMARY KEY,

TrainID INT,

RouteID INT,

DepartureTime DATETIME,

ArrivalTime DATETIME,

DayOfWeek VARCHAR(10),

FOREIGN KEY (TrainID) REFERENCES Train(TrainID),

FOREIGN KEY (RouteID) REFERENCES Route(RouteID)

);

CREATE TABLE MaintenanceLog (

LogID INT PRIMARY KEY,

TrainID INT,

Description TEXT,

MaintenanceDate DATE,

Cost DECIMAL(10, 2),

FOREIGN KEY (TrainID) REFERENCES Train(TrainID)

);