-- Check if exists, create & select database

DROP DATABASE IF EXISTS FacilityManagementSystem;

CREATE DATABASE FacilityManagementSystem;

USE FacilityManagementSystem;

-- Create tables

CREATE TABLE IF NOT EXISTS Facility

(FacilityID VARCHAR(20) NOT NULL,

Address VARCHAR(255),

Age INT,

Capatity INT,

CONSTRAINT Facility\_PK PRIMARY KEY (FacilityID));

CREATE TABLE IF NOT EXISTS Apartment

(FacilityID VARCHAR(20) NOT NULL,

CONSTRAINT Apartment\_PK PRIMARY KEY (FacilityID));

CREATE TABLE IF NOT EXISTS Unit

(UnitNo VARCHAR(20) NOT NULL,

Bedroom INT,

UnitStatus VARCHAR(50),

FacilityID VARCHAR(20),

CONSTRAINT Unit\_PK PRIMARY KEY (FacilityID, UnitNo),

CONSTRAINT Unit\_FK1 FOREIGN KEY(FacilityID) REFERENCES Apartment(FacilityID));

CREATE TABLE IF NOT EXISTS Admin

(AdminName VARCHAR(50) NOT NULL,

AdminLocation VARCHAR(50),

AdminPhoneNo VARCHAR(50),

CONSTRAINT Admin\_PK PRIMARY KEY (AdminName));

CREATE TABLE IF NOT EXISTS Staff

(StaffID INT NOT NULL AUTO\_INCREMENT,

Lname VARCHAR(50),

Fname VARCHAR(50),

PhoneNo VARCHAR(50),

AdminName VARCHAR(50),

CONSTRAINT Staff\_PK PRIMARY KEY (StaffID),

CONSTRAINT Admin\_FK FOREIGN KEY(AdminName) REFERENCES Admin(AdminName));

CREATE TABLE IF NOT EXISTS Specialty

(SpecialtyNo INT NOT NULL AUTO\_INCREMENT,

SpecialtyDescription VARCHAR(255),

StaffID INT,

CONSTRAINT Specialty\_PK PRIMARY KEY (SpecialtyNo),

CONSTRAINT Specialty\_FK FOREIGN KEY(StaffID) REFERENCES Staff(StaffID));

CREATE TABLE IF NOT EXISTS Inspection

(InspectionID INT NOT NULL AUTO\_INCREMENT,

InspectionDate DATE,

Technician VARCHAR(50),

FacilityID VARCHAR(20),

CONSTRAINT Inspection\_PK PRIMARY KEY (InspectionID),

CONSTRAINT Inspection\_FK FOREIGN KEY(FacilityID) REFERENCES Facility(FacilityID));

CREATE TABLE IF NOT EXISTS FacilityUser

(UserName VARCHAR(50) NOT NULL,

PhoneNo VARCHAR(50),

FacilityID VARCHAR(20),

CONSTRAINT FacilityUser\_PK PRIMARY KEY (UserName),

CONSTRAINT FacilityUser\_FK FOREIGN KEY(FacilityID) REFERENCES Facility(FacilityID));

CREATE TABLE IF NOT EXISTS AptUser

(UserName VARCHAR(50) NOT NULL,

UnitNo INT,

CONSTRAINT FacilityUser\_PK PRIMARY KEY (UserName));

CREATE TABLE IF NOT EXISTS FacilityProblem

(ProblemTypeNo INT NOT NULL AUTO\_INCREMENT,

ProblemType VARCHAR(255),

CONSTRAINT FacilityProblem\_PK PRIMARY KEY (ProblemTypeNo));

CREATE TABLE IF NOT EXISTS MaintenanceRequest

(RequestNo INT NOT NULL AUTO\_INCREMENT,

RequestDate DATE,

ProblemTypeNo INT,

UserName VARCHAR(50),

CONSTRAINT MaintenanceRequest\_PK PRIMARY KEY (RequestNo),

CONSTRAINT MaintenanceRequest\_FK1 FOREIGN KEY(ProblemTypeNo) REFERENCES FacilityProblem (ProblemTypeNo),

CONSTRAINT MaintenanceRequest\_FK2 FOREIGN KEY(UserName) REFERENCES FacilityUser (UserName));

CREATE TABLE IF NOT EXISTS Cost

(CostNo INT NOT NULL AUTO\_INCREMENT,

LaborCost DECIMAL(6,2),

MaterialCost DECIMAL(6,2),

CONSTRAINT Cost\_PK PRIMARY KEY (CostNo));

CREATE TABLE IF NOT EXISTS Schedule

(ScheduleNo INT NOT NULL AUTO\_INCREMENT,

ScheduleDate DATE,

StaffID INT,

CONSTRAINT Schedule\_PK PRIMARY KEY (ScheduleNo),

CONSTRAINT Schedule\_FK FOREIGN KEY(StaffID) REFERENCES Staff (StaffID));

CREATE TABLE IF NOT EXISTS MaintenanceOrder

(OrderNo INT NOT NULL AUTO\_INCREMENT,

OrderDate DATE,

OrderStatus VARCHAR(50),

CostNo INT,

CONSTRAINT MaintenanceOrder\_PK PRIMARY KEY (OrderNo),

CONSTRAINT MaintenanceOrder\_FK FOREIGN KEY(CostNo) REFERENCES Cost (CostNo));

CREATE TABLE IF NOT EXISTS Log

(LogID INT NOT NULL AUTO\_INCREMENT,

LogDate DATE,

LogInfo VARCHAR(255),

CONSTRAINT Log\_PK PRIMARY KEY (LogID));

CREATE TABLE IF NOT EXISTS Maintenance

(MaintenanceNo INT NOT NULL AUTO\_INCREMENT,

FacilityID VARCHAR(20),

OrderNo INT,

RequestNo INT,

ProblemTypeNo INT,

ScheduleNo INT,

LogID INT,

CONSTRAINT Maintenance\_PK PRIMARY KEY (MaintenanceNo),

CONSTRAINT Maintenance\_FK1 FOREIGN KEY(OrderNo) REFERENCES MaintenanceOrder (OrderNo),

CONSTRAINT Maintenance\_FK2 FOREIGN KEY(RequestNo) REFERENCES MaintenanceRequest (RequestNo),

CONSTRAINT Maintenance\_FK3 FOREIGN KEY(ProblemTypeNo) REFERENCES FacilityProblem (ProblemTypeNo),

CONSTRAINT Maintenance\_FK4 FOREIGN KEY(ScheduleNo) REFERENCES Schedule (ScheduleNo),

CONSTRAINT Maintenance\_FK5 FOREIGN KEY(LogID) REFERENCES Log (LogID));

-- Populate tables

INSERT INTO facility(`FacilityID`,`Address`,`Age`,`Capatity`) VALUES('APT001','520 Melrose ST, Chicago, IL',30, 100);

INSERT INTO facility(`FacilityID`, `Address`,`Age`,`Capatity`) VALUES('APT002','517 Melrose ST, Chicago, IL',15, 200);

INSERT INTO facility(`FacilityID`, `Address`,`Age`,`Capatity`) VALUES('SFH001', '1023 Fletcher ST, Chicago, IL',15, 1);

INSERT INTO Apartment(`FacilityID`) VALUES('APT001');

INSERT INTO Apartment(`FacilityID`) VALUES('APT002');

INSERT INTO unit(`UnitNo`,`Bedroom`,`UnitStatus`,`FacilityID`) VALUES('1A',1,'Available','APT001');

INSERT INTO unit(`UnitNo`,`Bedroom`,`UnitStatus`,`FacilityID`) VALUES('1B',2,'Rented','APT001');

INSERT INTO unit(`UnitNo`,`Bedroom`,`UnitStatus`,`FacilityID`) VALUES('2B',2,'Rented','APT001');

INSERT INTO unit(`UnitNo`,`Bedroom`,`UnitStatus`,`FacilityID`) VALUES('101',1,'Rented','APT002');

INSERT INTO unit(`UnitNo`,`Bedroom`,`UnitStatus`,`FacilityID`) VALUES('102',2,'Rented','APT002');

INSERT INTO unit(`UnitNo`,`Bedroom`,`UnitStatus`,`FacilityID`) VALUES('103',2,'Available','APT002');