

```
1: -- Active: 1708549946789@@127.0.0.1@3306@SoftwareDB
2:
3: DROP DATABASE IF EXISTS SoftwareDB;
4:
5: CREATE DATABASE SoftwareDB;
6: USE SoftwareDB;
7:
8: CREATE OR REPLACE TABLE Person (
9:   PersonID int(11) NOT NULL AUTO_INCREMENT,
10:   FName varchar(50),
11:   LName varchar(50),
12:   PhoneNum varchar(30),
13:   Email varchar(150),
14:   CONSTRAINT Person_PK PRIMARY KEY (PersonID),
15:   CONSTRAINT Person_Email_U UNIQUE (Email)
16: ) Engine = InnoDB CHARACTER SET=utf8 COLLATE=utf8_bin;
17:
18: CREATE OR REPLACE TABLE Client (
19:   ClientID int(11),
20:   FirstContactDate DATE,
21:   CONSTRAINT Client_ClientID_FK FOREIGN KEY (ClientID) REFERENCES Person(PersonID),
22:   CONSTRAINT ClientID_PK PRIMARY KEY (ClientID)
23: ) Engine = InnoDB CHARACTER SET=utf8 COLLATE=utf8_bin;
24:
25: CREATE OR REPLACE TABLE Employee (
26:   EmpID int(11),
27:   Salary int(9),
28:   CONSTRAINT Employee_EmpID_FK FOREIGN KEY (EmpID) REFERENCES Person(PersonID),
29:   CONSTRAINT EmpID_PK PRIMARY KEY (EmpID)
30: ) Engine = InnoDB CHARACTER SET=utf8 COLLATE=utf8_bin;
31:
32: CREATE OR REPLACE TABLE SoftwareProduct (
33:   SoftwareID int(11) NOT NULL AUTO_INCREMENT,
34:   Name varchar(150),
35:   CurrVersionNum DECIMAL(3,2),
36:   EmpID int(11) NOT NULL,
37:   Dependencies varchar(150) DEFAULT NULL,
38:   CONSTRAINT SoftwareProduct_Name_U UNIQUE (Name),
39:   CONSTRAINT SoftwareID_PK PRIMARY KEY (SoftwareID),
40:   CONSTRAINT SoftwareProduct_EmpID_FK FOREIGN KEY (EmpID) REFERENCES Employee(EmpID)
41: ) Engine = InnoDB CHARACTER SET=utf8 COLLATE=utf8_bin;
42:
43: CREATE OR REPLACE TABLE WorkingOn (
44:   SoftwareID int(11) NOT NULL,
45:   EmpID int(11) NOT NULL,
46:   CONSTRAINT WorkingOn_PK PRIMARY KEY (SoftwareID, EmpID),
47:   CONSTRAINT WorkingOn_SoftwareID_FK FOREIGN KEY (SoftwareID) REFERENCES SoftwareProduct(SoftwareID),
48:   CONSTRAINT WorkingOn_EmpID_FK FOREIGN KEY (EmpID) REFERENCES Employee(EmpID)
49: ) Engine = InnoDB CHARACTER SET=utf8 COLLATE=utf8_bin;
50:
51: CREATE OR REPLACE TABLE ServicePlan (
52:   PlanID int(11) NOT NULL AUTO_INCREMENT,
53:   Cost int(12) NOT NULL,
54:   ServiceLevel varchar(50) NOT NULL,
55:   CONSTRAINT ServicePlan_PK PRIMARY KEY (PlanID)
56: ) Engine = InnoDB CHARACTER SET=utf8 COLLATE=utf8_bin;
57:
58: -- UsesProduct table also contains PointOfContact relationship and BuysServicePlan
59: CREATE OR REPLACE TABLE UsesProduct (
60:   ClientID int(11) NOT NULL,
61:   SoftwareID int(11) NOT NULL,
62:   PtOfContact_EmpID int(11) NOT NULL,
63:   PlanID int(11) DEFAULT NULL,
64:   CONSTRAINT UsesProduct_PK PRIMARY KEY (ClientID, SoftwareID, PtOfContact_EmpID),
65:   CONSTRAINT PlanID_FK FOREIGN KEY (PlanID) REFERENCES ServicePlan(PlanID),
66:   CONSTRAINT UsesProduct_ClientID_FK FOREIGN KEY (ClientID) REFERENCES Client(ClientID),
67:   CONSTRAINT UsesProduct_PtOfContact_EmpID_FK FOREIGN KEY (PtOfContact_EmpID) REFERENCES Employee(EmpID),
68:   CONSTRAINT UsesProduct_SoftwareID_FK FOREIGN KEY (SoftwareID) REFERENCES SoftwareProduct(SoftwareID)
69: ) Engine = InnoDB CHARACTER SET=utf8 COLLATE=utf8_bin;
70:
71: CREATE OR REPLACE TABLE Dependent (
72:   ParentID int(11) NOT NULL,
73:   ChildID int(11) NOT NULL,
74:   CONSTRAINT Dependent_PK PRIMARY KEY (ParentID, ChildID),
75:   CONSTRAINT ParentID_FK FOREIGN KEY (ParentID) REFERENCES SoftwareProduct(EmpID)
76: ) Engine = InnoDB CHARACTER SET=utf8 COLLATE=utf8_bin;
77:
```

```
78: ALTER TABLE `Dependent` ADD CONSTRAINT ChildID_FK FOREIGN KEY (ChildID) REFERENCES SoftwareProduct (EmpID)
```