1.

Customer

|  |  |  |
| --- | --- | --- |
| CUS\_CODE | INT | 5 |
| CUS\_LNAME | VARCHAR | 20 |
| CUS\_FNAME | VARCHAR | 20 |
| CUS\_INITIAL | CHAR | 1 |
| CUS\_AREACODE | CHAR | 4 |
| CUS\_PHONE | CHAR | 8 |
| CUS\_BALANCE | DOUBLE | 3,2 |

Invoice

|  |  |  |
| --- | --- | --- |
| INV\_NUMBER | INT | 4 |
| CUS\_CODE | INT | 5 |
| INV\_DATE | DATE |  |

Line

|  |  |  |
| --- | --- | --- |
| INV\_NUMBER | INT | 4 |
| LINE\_NUMBER | INT |  |
| PROD\_CODE | CHAR | 8 |
| LINE\_UNITS | INT |  |
| LINE\_PRICE | DOUBLE | 3,2 |

Product

|  |  |  |
| --- | --- | --- |
| PROD\_CODE | CHAR | 8 |
| PROD\_DESCRIPT | LONGTEXT |  |
| PROD\_START\_SALE\_DATE | DATE |  |
| PROD\_ON\_HAND | INT |  |
| PROD\_PRICE | DOUBLE | 3,2 |
| PROD\_SALE | DOUBLE | 3,2 |
| VEND\_CODE | INT | 5 |

Vendor

|  |  |  |
| --- | --- | --- |
| VEND\_CODE | INT | 5 |
| VEND\_NAME | VARCHAR | 30 |
| VEND\_CONTACT | VARCHAR | 20 |
| VEND\_AREACODE | CHAR | 4 |
| VEND\_PHONE | CHAR | 8 |
| VEND\_COUNTRY | CHAR | 2 |

2.

DROP DATABASE IF EXISTS SaleCo;

CREATE DATABASE SaleCo;

USE SaleCo;

#Customer

CREATE TABLE Customer (

CUS\_CODE INT(5),

CUS\_LNAME VARCHAR(20),

CUS\_FNAME VARCHAR(20),

CUS\_INITIAL CHAR(1),

CUS\_AREACODE CHAR(4),

CUS\_PHONE CHAR(8),

CUS\_BALANCE DOUBLE(5,2)

);

#Invoice

CREATE TABLE Invoice (

    INV\_NUMBER INT(4),

CUS\_CODE INT(5),

INV\_DATE DATE

);

#Line

CREATE TABLE Line (

LINE\_NUMBER INT,

    INV\_NUMBER INT(4),

PROD\_CODE CHAR(8),

LINE\_UNITS INT,

LINE\_PRICE DOUBLE(5,2)

);

#Product

CREATE TABLE Product (

    PROD\_CODE CHAR(8),

PROD\_DESCRIPT LONGTEXT,

PROD\_START\_SALE\_DATE DATE,

PROD\_ON\_HAND INT,

PROD\_PRICE DOUBLE(5,2),

PROD\_SALE DOUBLE(5,2),

VEND\_CODE INT(5)

);

#Vendor

CREATE TABLE Vendor (

    VEND\_CODE INT(5),

VEND\_NAME VARCHAR(30),

VEND\_CONTACT VARCHAR(20),

VEND\_AREACODE CHAR(4),

VEND\_PHONE CHAR(8),

VEND\_COUNTRY CHAR(2)

);

3.

#Bæta við keys

ALTER TABLE Customer ADD PRIMARY KEY(CUS\_CODE);

ALTER TABLE Invoice ADD PRIMARY KEY(INV\_NUMBER);

ALTER TABLE Line ADD PRIMARY KEY(LINE\_NUMBER);

ALTER TABLE Product ADD PRIMARY KEY(PROD\_CODE);

ALTER TABLE Vendor ADD PRIMARY KEY(VEND\_CODE);

#Bæta við forign keys

ALTER TABLE Invoice ADD CONSTRAINT CUS\_CODE\_FK FOREIGN KEY (CUS\_CODE) REFERENCES Customer(CUS\_CODE) ON UPDATE CASCADE;

ALTER TABLE Line ADD CONSTRAINT INV\_NUMBER\_FK FOREIGN KEY (INV\_NUMBER) REFERENCES Invoice(INV\_NUMBER) ON DELETE CASCADE;

ALTER TABLE Line ADD CONSTRAINT PROD\_CODE\_FK FOREIGN KEY (PROD\_CODE) REFERENCES Product(PROD\_CODE);# ON DELETE SET NULL; # This makes a 1064 error: You have an error in your SQL syntax;

ALTER TABLE Product ADD CONSTRAINT VEND\_CODE\_FK FOREIGN KEY (VEND\_CODE) REFERENCES Vendor(VEND\_CODE);

4.

#Setja default value

ALTER TABLE Customer MODIFY COLUMN CUS\_BALANCE DOUBLE(5,2) DEFAULT 0.00;

ALTER TABLE Customer MODIFY COLUMN CUS\_AREACODE CHAR(4) DEFAULT "0181";

ALTER TABLE Line MODIFY COLUMN LINE\_UNITS INT DEFAULT 0;

ALTER TABLE Line MODIFY COLUMN LINE\_PRICE DOUBLE(5,2) DEFAULT 0.00;

5.

#Insert Into Tables

#CUSTOMER rows

INSERT INTO

    Customer(CUS\_CODE,CUS\_LNAME,CUS\_FNAME,CUS\_INITIAL,CUS\_AREACODE,CUS\_PHONE,CUS\_BALANCE)

VALUES

    (10010,'Ramas','Alfred','A','0181','844-2573',0),

    (10011,'Dunne','Leona','K','0161','894-1238',0),

    (10012,'Smith','Kathy','W','0181','894-2285',345.86);

#INVOICE rows

INSERT INTO

    Invoice(INV\_NUMBER,CUS\_CODE,INV\_DATE)

VALUES

    (1001,10010,'2008-01-16'),

    (1002,10011,'2008-01-16'),

    (1003,10012,'2008-01-16');

#VENDOR rows

INSERT INTO

    Vendor(VEND\_CODE,VEND\_NAME,VEND\_CONTACT,VEND\_AREACODE,VEND\_PHONE,VEND\_COUNTRY)

VALUES

    (21225,'Bryson, Inc.','Smithson','0181','223-3234','UK'),

    (21226,'SuperLoo, Inc.','Flushing','0113','215-8995','SA'),

    (21231,'D\&E Supply','Singh','0181','228-3245','UK');

#PRODUCT rows

INSERT INTO

    Product(PROD\_CODE,PROD\_DESCRIPT,PROD\_START\_SALE\_DATE,PROD\_ON\_HAND,PROD\_PRICE,PROD\_SALE,VEND\_CODE)

VALUES

    ('11QER/31','Power painter, 15 psi., 3-nozzle','2007-11-07',8, 109.99,0.00,21225),

    ('13-Q2/P2','7.25-cm. pwr. saw blade','2007-12-14', 32, 14.99,0.05,21226),

    ('14-Q1/L3','9.00-cm. pwr. saw blade','2007-11-13', 18, 17.49,0.00,21231);

#LINE rows

INSERT INTO

    Line(INV\_NUMBER,LINE\_NUMBER,PROD\_CODE,LINE\_UNITS,LINE\_PRICE)

VALUES

    (1001,1,'11QER/31',1,14.99),

    (1002,2,'13-Q2/P2',1,9.95),

    (1003,3,'14-Q1/L3',2,4.99);

6.

CREATE TABLE Employees (

EMP\_NUM INT PRIMARY KEY,

EMP\_TITLE CHAR(10),

EMP\_LNAME VARCHAR(15),

EMP\_FNAME VARCHAR(15),

EMP\_INITIAL CHAR(1),

EMP\_DOB DATETIME,

EMP\_HIR\_DATE DATETIME,

EMP\_AREACODE CHAR(5),

EMP\_PHONE CHAR(8),

EMP\_MGR INT

);