# Order Entry Database Background

The Order Entry database is used for extra problems in modules 4 and 5. This document describes the tables and relationships.

# Table Description and Usage

The Order Entry database is an extension of the order entry tables used in the extra problems of Module 3. Table 1 lists the meaning of each table and Figure 1 shows the Oracle database diagram. After the relationship diagram, sample rows and CREATE TABLE statements are shown for each table. In addition to the other documentation, here are some notes about the Order Entry Database:

* The primary key of the *OrdLine* table is a combination of *OrdNo* and *ProdNo*.
* The *Employee* table has a self-referencing (unary) relationship to itself through the foreign key, *SupEmpNo*, the employee number of the supervising employee. In the relationship diagram, the table *Employee\_1* is a representation of the self-referencing relationship, not a real table.

Table 1: Tables of the Order Entry Database

|  |  |
| --- | --- |
| **Table Name** | **Description** |
| Customer | List of customers who have placed orders |
| OrderTbl | Contains the heading part of an order; Internet orders do not have an employee |
| Employee | List of employees who can take orders |
| OrdLine | Contains the product detail parts of orders |
| Product | List of products that may be ordered |

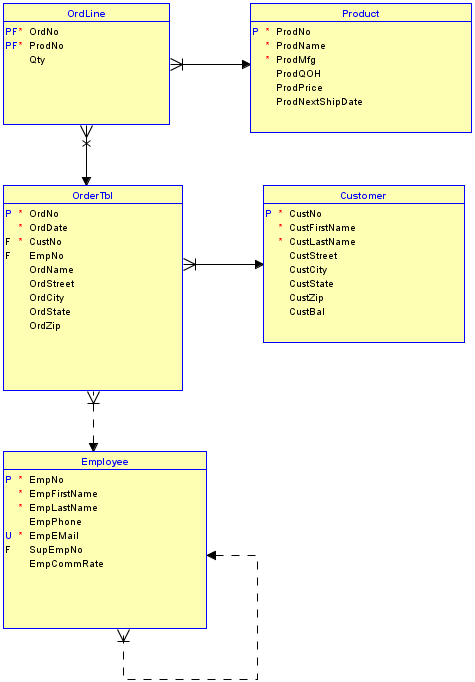


Figure 1: Oracle Database Diagram for the Order Entry Database

# Table Listings

**Customer**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **CustNo** | **CustFirstName** | **CustLastName** | **CustStreet** | **CustCity** | **CustState** | **CustZip** | **CustBal** |
| C0954327 | Sheri | Gordon | 336 Hill St. | Littleton | CO | 80129-5543 | $230.00 |
| C1010398 | Jim | Glussman | 1432 E. Ravenna | Denver | CO | 80111-0033 | $200.00 |
| C2388597 | Beth | Taylor | 2396 Rafter Rd | Seattle | WA | 98103-1121 | $500.00 |
| C3340959 | Betty | Wise | 4334 153rd NW | Seattle | WA | 98178-3311 | $200.00 |
| C3499503 | Bob | Mann | 1190 Lorraine Cir. | Monroe | WA | 98013-1095 | $0.00 |
| C8543321 | Ron | Thompson | 789 122nd St. | Renton | WA | 98666-1289 | $85.00 |
| C8574932 | Wally | Jones | 411 Webber Ave. | Seattle | WA | 98105-1093 | $1,500.00 |
| C8654390 | Candy | Kendall | 456 Pine St. | Seattle | WA | 98105-3345 | $50.00 |
| C9128574 | Jerry | Wyatt | 16212 123rd Ct. | Denver | CO | 80222-0022 | $100.00 |
| C9403348 | Mike | Boren | 642 Crest Ave. | Englewood | CO | 80113-5431 | $0.00 |
| C9432910 | Larry | Styles | 9825 S. Crest Lane | Bellevue | WA | 98104-2211 | $250.00 |
| C9543029 | Sharon | Johnson | 1223 Meyer Way | Fife | WA | 98222-1123 | $856.00 |
| C9549302 | Todd | Hayes | 1400 NW 88th | Lynnwood | WA | 98036-2244 | $0.00 |
| C9857432 | Homer | Wells | 123 Main St. | Seattle | WA | 98105-4322 | $500.00 |
| C9865874 | Mary | Hill | 206 McCaffrey | Littleton | CO | 80129-5543 | $150.00 |
| C9943201 | Harry | Sanders | 1280 S. Hill Rd. | Fife | WA | 98222-2258 | $1,000.00 |

**OrderTbl**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **OrdNo** | **OrdDate** | **CustNo** | **EmpNo** | **OrdName** | **OrdStreet** | **OrdCity** | **OrdState** | **OrdZip** |
| O1116324 | 01/23/2021 | C0954327 | E8544399 | Sheri Gordon | 336 Hill St. | Littleton | CO | 80129-5543 |
| O1231231 | 01/23/2021 | C9432910 | E9954302 | Larry Styles | 9825 S. Crest Lane | Bellevue | WA | 98104-2211 |
| O1241518 | 02/10/2021 | C9549302 | [null] | Todd Hayes | 1400 NW 88th | Lynnwood | WA | 98036-2244 |
| O1455122 | 01/09/2021 | C8574932 | E9345771 | Wally Jones | 411 Webber Ave. | Seattle | WA | 98105-1093 |
| O1579999 | 01/05/2021 | C9543029 | E8544399 | Tom Johnson | 1632 Ocean Dr. | Des Moines | WA | 98222-1123 |
| O1615141 | 01/23/2021 | C8654390 | E8544399 | Candy Kendall | 456 Pine St. | Seattle | WA | 98105-3345 |
| O1656777 | 02/11/2021 | C8543321 | [null] | Ron Thompson | 789 122nd St. | Renton | WA | 98666-1289 |
| O2233457 | 01/12/2021 | C2388597 | E9884325 | Beth Taylor | 2396 Rafter Rd | Seattle | WA | 98103-1121 |
| O2334661 | 01/14/2021 | C0954327 | E1329594 | Mrs. Ruth Gordon | 233 S. 166th | Seattle | WA | 98011-8822 |
| O3252629 | 01/23/2021 | C9403348 | E9954302 | Mike Boren | 642 Crest Ave. | Englewood | CO | 80113-5431 |
| O3331222 | 01/13/2021 | C1010398 | [null] | Jim Glussman | 1432 E. Ravenna | Denver | CO | 80111-0033 |
| O3377543 | 01/15/2021 | C9128574 | E8843211 | Jerry Wyatt | 16212 123rd Ct. | Denver | CO | 80222-0022 |
| O4714645 | 01/11/2021 | C2388597 | E1329594 | Beth Taylor | 2396 Rafter Rd | Seattle | WA | 98103-1121 |
| O5511365 | 01/22/2021 | C3340959 | E9884325 | Betty White | 4334 153rd NW | Seattle | WA | 98178-3311 |
| O6565656 | 01/20/2021 | C9865874 | E8843211 | Mr. Jack Sibley | 166 E. 344th | Renton | WA | 98006-5543 |
| O7847172 | 01/23/2021 | C9943201 | [null] | Harry Sanders | 1280 S. Hill Rd. | Fife | WA | 98222-2258 |
| O7959898 | 02/19/2021 | C8543321 | E8544399 | Ron Thompson | 789 122nd St. | Renton | WA | 98666-1289 |
| O7989497 | 01/16/2021 | C3499503 | E9345771 | Bob Mann | 1190 Lorraine Cir. | Monroe | WA | 98013-1095 |
| O8979495 | 01/23/2021 | C9865874 | [null] | HelenSibley | 206 McCaffrey | Renton | WA | 98006-5543 |
| O9919699 | 02/11/2021 | C9857432 | E9954302 | Homer Wells | 123 Main St. | Seattle | WA | 98105-4322 |

**Employee**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **EmpNo** | **EmpFirstName** | **EmpLastName** | **EmpPhone** | **EmpEMail** | **SupEmpNo** | **EmpCommRate** |
| E1329594 | Landi | Santos | (303) 789-1234 | LSantos@bigco.com | E8843211 | 0.02 |
| E8544399 | Joe | Jenkins | (303) 221-9875 | JJenkins@bigco.com | E8843211 | 0.02 |
| E8843211 | Amy | Tang | (303) 556-4321 | ATang@bigco.com | E9884325 | 0.04 |
| E9345771 | Colin | White | (303) 221-4453 | CWhite@bigco.com | E9884325 | 0.04 |
| E9884325 | Thomas | Johnson | (303) 556-9987 | TJohnson@bigco.com | [null] | 0.05 |
| E9954302 | Mary | Hill | (303) 556-9871 | MHill@bigco.com | E8843211 | 0.02 |
| E9973110 | Theresa | Beck | (720) 320-2234 | TBeck@bigco.com | E9884325 | [null] |

**Product**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ProdNo** | **ProdName** | **ProdMfg** | **ProdQOH** | **ProdPrice** | **ProdNextShipDate** Changed after draft sent. Must change in the copy edits. |
| P0036566 | 17 inch Color Monitor | ColorMeg, Inc. | 12 | $169.00 | 2/20/2021 |
| P0036577 | 19 inch Color Monitor | ColorMeg, Inc. | 10 | $319.00 | 2/20/2021 |
| P1114590 | R3000 Color Laser Printer | Connex | 5 | $699.00 | 1/22/2021 |
| P1412138 | 10 Foot Printer Cable | Ethlite | 100 | $12.00 | [null] |
| P1445671 | 8-Outlet Surge Protector | Intersafe | 33 | $14.99 | [null] |
| P1556678 | CVP Ink Jet Color Printer | Connex | 8 | $99.00 | 1/22/2021 |
| P3455443 | Color Ink Jet Cartridge | Connex | 24 | $38.00 | 1/22/2021 |
| P4200344 | 36-Bit Color Scanner | UV Components | 16 | $199.99 | 1/29/2021 |
| P6677900 | Black Ink Jet Cartridge | Connex | 44 | $25.69 | [null] |
| P9995676 | Battery Back-up System | Cybercx | 12 | $89.00 | 2/1/2021 |

**OrdLine**

|  |  |  |
| --- | --- | --- |
| **OrdNo** | **ProdNo** | **Qty** |
| O1116324 | P1445671 | 1 |
| O1231231 | P0036566 | 1 |
| O1231231 | P1445671 | 1 |
| O1241518 | P0036577 | 1 |
| O1455122 | P4200344 | 1 |
| O1579999 | P1556678 | 1 |
| O1579999 | P6677900 | 1 |
| O1579999 | P9995676 | 1 |
| O1615141 | P0036566 | 1 |
| O1615141 | P1445671 | 1 |
| O1615141 | P4200344 | 1 |
| O1656777 | P1445671 | 1 |
| O1656777 | P1556678 | 1 |
| O2233457 | P0036577 | 1 |
| O2233457 | P1445671 | 1 |
| O2334661 | P0036566 | 1 |
| O2334661 | P1412138 | 1 |
| O2334661 | P1556678 | 1 |
| O3252629 | P4200344 | 1 |
| O3252629 | P9995676 | 1 |
| O3331222 | P1412138 | 1 |
| O3331222 | P1556678 | 1 |
| O3331222 | P3455443 | 1 |
| O3377543 | P1445671 | 1 |
| O3377543 | P9995676 | 1 |
| O4714645 | P0036566 | 1 |
| O4714645 | P9995676 | 1 |
| O5511365 | P1412138 | 1 |
| O5511365 | P1445671 | 1 |
| O5511365 | P1556678 | 1 |
| O5511365 | P3455443 | 1 |
| O5511365 | P6677900 | 1 |
| O6565656 | P0036566 | 10 |
| O7847172 | P1556678 | 1 |
| O7847172 | P6677900 | 1 |
| O7959898 | P1412138 | 5 |
| O7959898 | P1556678 | 5 |
| O7959898 | P3455443 | 5 |
| O7959898 | P6677900 | 5 |
| O7989497 | P1114590 | 2 |
| O7989497 | P1412138 | 2 |
| O7989497 | P1445671 | 3 |
| O8979495 | P1114590 | 1 |
| O8979495 | P1412138 | 1 |
| O8979495 | P1445671 | 1 |
| O9919699 | P0036577 | 1 |
| O9919699 | P1114590 | 1 |
| O9919699 | P4200344 | 1 |

# CREATE TABLE Statements

|  |
| --- |
| CREATE TABLE Customer  ( CustNo CHAR(8),  CustFirstName VARCHAR(20) CONSTRAINT CustFirstNameRequired NOT NULL,  CustLastName VARCHAR(30) CONSTRAINT CustLastNameRequired NOT NULL,  CustStreet VARCHAR(50),  CustCity VARCHAR(30),  CustState CHAR(2),  CustZip CHAR(10),  CustBal DECIMAL(12,2) DEFAULT 0,  CONSTRAINT PKCustomer PRIMARY KEY (CustNo) ) |

|  |
| --- |
| CREATE TABLE OrderTbl  ( OrdNo CHAR(8),  OrdDate DATE CONSTRAINT OrdDateRequired NOT NULL,  CustNo CHAR(8) CONSTRAINT CustNoRequired NOT NULL,  EmpNo CHAR(8),  OrdName VARCHAR(50),  OrdStreet VARCHAR(50),  OrdCity VARCHAR(30),  OrdState CHAR(2),  OrdZip CHAR(10),  CONSTRAINT PKOrderTbl PRIMARY KEY (OrdNo) ,  CONSTRAINT FKCustNo FOREIGN KEY (CustNo) REFERENCES Customer,  CONSTRAINT FKEmpNo FOREIGN KEY (EmpNo) REFERENCES Employee ) |

|  |
| --- |
| CREATE TABLE OrdLine  ( OrdNo CHAR(8),  ProdNo CHAR(8),  Qty INTEGER DEFAULT 1,  CONSTRAINT PKOrdLine PRIMARY KEY (OrdNo, ProdNo),  CONSTRAINT FKOrdNo FOREIGN KEY (OrdNo) REFERENCES OrderTbl  ON DELETE CASCADE,  CONSTRAINT FKProdNo FOREIGN KEY (ProdNo) REFERENCES Product ) |

|  |
| --- |
| CREATE TABLE Employee  ( EmpNo CHAR(8),  EmpFirstName VARCHAR(20) CONSTRAINT EmpFirstNameRequired NOT NULL,  EmpLastName VARCHAR(30) CONSTRAINT EmpLastNameRequired NOT NULL,  EmpPhone CHAR(15),  EmpEMail VARCHAR(50) CONSTRAINT EmpEMailRequired NOT NULL,  SupEmpNo CHAR(8),  EmpCommRate DECIMAL(3,3),  CONSTRAINT PKEmployee PRIMARY KEY (EmpNo),  CONSTRAINT UNIQUEEMail UNIQUE(EmpEMail),  CONSTRAINT FKSupEmpNo FOREIGN KEY (SupEmpNo) REFERENCES Employee ) |

|  |
| --- |
| CREATE TABLE Product  ( ProdNo CHAR(8),  ProdName VARCHAR(50) CONSTRAINT ProdNameRequired NOT NULL,  ProdMfg VARCHAR(20) CONSTRAINT ProdMfgRequired NOT NULL,  ProdQOH INTEGER DEFAULT 0,  ProdPrice DECIMAL(12,2) DEFAULT 0,  ProdNextShipDate DATE,  CONSTRAINT PKProduct PRIMARY KEY (ProdNo) ) |