Week 4: DDL & Sample SQL for Sales Schema

```
--CREATE TABLE SECTION
  _____
CREATE TABLE SalesRepresentative
 (
  salesrepid
              INTEGER NOT NULL,
  lastname
               VARCHAR(50)
  firstname
               VARCHAR(50),
  streetaddress
               VARCHAR(255),
  city
            VARCHAR(25),
  state
             VARCHAR(25).
  zipcode
              VARCHAR(10).
              VARCHAR(50) NOT NULL,
  region
  regiondescription VARCHAR(255),
  totalcommission FLOAT
  commissionrate FLOAT
  CONSTRAINT salesrepresentative_pk PRIMARY KEY (salesrepid, region)
  );
CREATE TABLE Customer
  customerid
              VARCHAR(25) NOT NULL PRIMARY KEY,
  lastname
             VARCHAR(50).
             VARCHAR(50),
  firstname
  streetaddress VARCHAR(255),
           VARCHAR(25),
  city
  state
           VARCHAR(25),
  zipcode
             VARCHAR(10),
  currentbalance FLOAT.
  creditlimit FLOAT
  salesrepid
             INTEGER
 );
CREATE TABLE Sales_Order
  orderid
           INTEGER NOT NULL PRIMARY KEY,
  odate
           TIMESTAMP(0)
  customerid VARCHAR(25) NOT NULL REFERENCES customer(customerid),
  shippingdate TIMESTAMP(0)
 );
```

```
CREATE TABLE Part
  partid
            VARCHAR(25) NOT NULL PRIMARY KEY,
  partdescription VARCHAR(255),
  uniteonhand
              INTEGER,
  pclass
            VARCHAR(255),
  warehousenumber VARCHAR(25),
  unitprice
             FLOAT
 );
CREATE TABLE OrderLines
 (
  orderid
           INTEGER NOT NULL,
  partid
           VARCHAR(25),
  numberordered INTEGER,
  quotedprice FLOAT,
  CONSTRAINT orderlines_pk PRIMARY KEY (orderid, partid)
 );
```

--Insert Statements for SalesrepResentative Table

```
INSERT INTO salesrepresentative
       (salesrepid,
        lastname.
        firstname.
        streetaddress,
        city,
        state,
        zipcode,
        region,
        regiondescription,
        totalcommission,
        commissionrate)
VALUES
             (3,
        'Jones',
        'Mary',
        '123 Main',
        'Grant',
        'MI'.
        '48219',
        'C',
        'Central',
        2150,
        0.05);
INSERT INTO salesrepresentative
       (salesrepid,
        lastname.
        firstname,
        streetaddress,
        city,
        state,
        zipcode,
        region,
        regiondescription,
        totalcommission,
        commissionrate)
VALUES
             (3,
        'Jones',
        'Mary',
        '123 Main',
```

```
'Grant',
        'MI',
        '48219',
        Έ',
        'Eastern',
        2150,
       0.05);
INSERT INTO salesrepresentative
       (salesrepid,
        lastname,
        firstname.
        streetaddress
        city,
        state,
        zipcode,
        region,
        regiondescription,
        totalcommission,
        commissionrate)
VALUES
             (6.
        'Smith'.
        'William',
        '102 Raymond',
        'Ada',
        'MI'
        '49441'
        'W',
        'Western',
        4912.5.
       0.07);
INSERT INTO salesrepresentative
       (salesrepid,
        lastname,
        firstname.
        streetaddress
        city,
        state,
        zipcode,
        region,
        regiondescription,
        totalcommission.
        commissionrate)
VALUES
             (12,
        'Diaz'
        'Miguel',
        '419 Harper',
```

```
'Lansing',
        'MI',
        '49224',
        'SC',
        'South Central',
        2150,
       0.05);
INSERT INTO salesrepresentative
       (salesrepid,
        lastname,
       firstname,
        streetaddress,
       city,
       state,
        zipcode,
       region,
       regiondescription,
       totalcommission,
       commissionrate)
VALUES
             (12,
       'Diaz',
        'Miguel',
        '419 Harper',
       'Lansing',
        'MI',
        '49224',
        'UP',
       'Upper Pennisula',
       2150,
       0.05);
```

-- Insert Statements for Customer Table

```
INSERT INTO customer
       (customerid,
       lastname,
       firstname,
       streetaddress,
       city,
       state,
       zipcode,
       currentbalance,
       creditlimit.
       salesrepid)
VALUES (124,
       'Mohnani',
       'Payal',
       '481 Oak',
       'Lansing',
       'MI',
        '49224',
       818.75,
        1000.
        3);
INSERT INTO customer
       (customerid,
       lastname,
       firstname,
       streetaddress,
       city,
       state,
       zipcode,
       currentbalance,
       creditlimit,
       salesrepid)
VALUES
           (256,
        'Waters',
       'Cheryl',
       '215 Pete',
        'Grant'.
        'MI',
       '49219',
       21.5.
        1500,
        6);
INSERT INTO customer
       (customerid,
```

```
lastname,
       firstname,
       streetaddress,
       city,
       state,
       zipcode,
       currentbalance,
       creditlimit,
       salesrepid)
VALUES (311,
       'Charles',
       'Don',
       '48 College',
       'Ira',
       'MI',
       '49034',
       825.75.
        1000,
        12);
INSERT INTO customer
       (customerid,
       lastname,
       firstname,
       streetaddress,
       city,
       state,
       zipcode,
       currentbalance,
       creditlimit,
       salesrepid)
VALUES (315,
       'Daniels',
        'Tom',
       '914 Cherry',
       'Kent',
       'MI',
       '48391',
       770.75,
       750,
       6);
INSERT INTO customer
       (customerid,
       lastname,
       firstname,
       streetaddress,
       city,
```

```
state,
       zipcode,
       currentbalance,
       creditlimit,
       salesrepid)
VALUES
            (405,
       'Williams',
        'Al'.
        '519 Watson',
        'Grant'.
        'MI',
        '49219',
       402.75,
        1500,
        12);
INSERT INTO customer
       (customerid,
       lastname,
       firstname.
       streetaddress,
       city,
       state,
        zipcode,
       currentbalance,
       creditlimit,
       salesrepid)
VALUES
             (412,
        'Adams',
       'Sally',
       '16 Elm',
       'Lansing',
       'MI',
        '49224'
        1817.5,
        2000,
        3);
INSERT INTO customer
       (customerid,
       lastname,
       firstname,
       streetaddress,
       city,
        state,
       zipcode,
       currentbalance.
       creditlimit,
```

```
salesrepid)
VALUES
             (522,
        'Nelson',
        'Mary',
        '108 Pine',
        'Ada',
        'MI',
        '49441',
        98.75,
        1500,
        2);
INSERT INTO customer
       (customerid,
        lastname,
        firstname.
        streetaddress.
        city,
        state,
        zipcode,
        currentbalance,
        creditlimit,
        salesrepid)
             (567,
VALUES
        'Dinh',
        'Tran',
        '808 Ridge',
        'Harper',
        'MI',
        '48421',
        402.4,
        750,
        6);
INSERT INTO customer
       (customerid,
        lastname,
        firstname,
        streetaddress,
        city,
       state,
        zipcode,
        currentbalance,
        creditlimit.
        salesrepid)
VALUES
             (587,
        'Galvez',
        'Mara',
```

```
'512 Pine',
       'Ada',
       'MI',
       '49441',
       114.6,
        1000,
       6);
INSERT INTO customer
       (customerid,
       lastname,
       firstname,
       streetaddress,
       city,
       state,
       zipcode,
       currentbalance,
       creditlimit,
       salesrepid)
VALUES (622,
       'Martin',
       'Dan',
       '419 Chip',
       'Grant',
       'MI',
       '49219',
       1045.75,
        1000,
       3);
```

<u>Insert Statements for Sales_Order_Table</u>

```
INSERT INTO sales_order
      (orderid,
       odate.
       customerid,
       shippingdate)
           (12489,
VALUES
       '02-JUL-2011',
       124,
       '22-JUL-2011');
INSERT INTO sales_order
       (orderid,
       odate.
       customerid,
       shippingdate)
VALUES
           (12491,
       '02-JUL-2011',
       311,
       '22-JUL-2011');
INSERT INTO sales order
       (orderid,
       odate.
       customerid.
       shippingdate)
           (12494,
VALUES
       '04-JUL-2011',
       315.
       '12-JUL-2011');
INSERT INTO sales_order
       (orderid.
       odate.
       customerid,
       shippingdate)
            (12495,
VALUES
       '04-JUL-2011',
       256.
       '22-AUG-2011');
INSERT INTO sales_order
       (orderid,
       odate.
       customerid,
       shippingdate)
VALUES
           (12498,
```

```
'05-JUL-2011',
       522,
      NULL);
INSERT INTO sales_order
      (orderid,
      odate,
      customerid,
       shippingdate)
VALUES (12500,
       '05-JUL-2011',
       124,
       '22-AUG-2011');
INSERT INTO sales_order
      (orderid,
      odate,
      customerid,
       shippingdate)
VALUES (12504,
       '05-JUL-2011',
       522,
      NULL);
```

Insert Statements for Part Table

```
INSERT INTO part
       (partid,
       partdescription,
       uniteonhand,
       pclass,
       warehousenumber,
       unitprice)
          ('AX12',
VALUES
       'Iron'.
        104,
       'HW',
       '3',
       24.95);
INSERT INTO part
       (partid,
       partdescription,
       uniteonhand,
       pclass,
       warehousenumber,
       unitprice)
            ('AZ52',
VALUES
       'Dartboard'.
       20,
       'SW',
        '2',
       12.95);
INSERT INTO part
       (partid,
       partdescription,
       uniteonhand,
       pclass,
       warehousenumber,
       unitprice)
VALUES ('BH22',
       'Corn Popper',
       95,
       'HW',
       '3',
       24.95);
INSERT INTO part
       (partid,
       partdescription,
```

```
uniteonhand,
       pclass,
       warehousenumber,
       unitprice)
           ('BT04',
VALUES
       'Gas Grill',
        11,
       'AP',
       '2',
       149.99);
INSERT INTO part
       (partid,
       partdescription,
       uniteonhand,
       pclass,
       warehousenumber,
       unitprice)
            ('BZ66',
VALUES
       'Washer'.
       52,
       'AP',
       '3',
       39.99);
INSERT INTO part
       (partid,
       partdescription,
       uniteonhand,
       pclass,
       warehousenumber,
       unitprice)
VALUES
           ('CA14',
       'Griddle',
       78,
       'HW',
       '3',
       39.99);
INSERT INTO part
       (partid,
       partdescription,
       uniteonhand,
       pclass,
       warehousenumber,
       unitprice)
VALUES ('CB03',
       'Bike',
```

```
44,
       'SG',
       '1',
       299.99);
INSERT INTO part
       (partid,
       partdescription,
       uniteonhand,
       pclass,
       warehousenumber,
       unitprice)
VALUES ('CX11',
       'Blender',
       112,
       'HW',
       '3',
       22.95);
INSERT INTO part
       (partid,
       partdescription,
       uniteonhand,
       pclass,
       warehousenumber,
       unitprice)
VALUES ('CZ81',
       'Treadmill',
       68,
       'SG',
       '2',
       349.95);
```

Insert Statements for OrderLines Table

```
INSERT INTO orderlines
      (orderid,
       partid,
       numberordered,
       quotedprice)
VALUES (12489,
       'AX12',
       11,
       21.95);
INSERT INTO orderlines
      (orderid,
       partid,
       numberordered,
       quotedprice)
VALUES (12491,
       'BT04',
       1,
       149.99);
INSERT INTO orderlines
      (orderid,
       partid,
       numberordered,
       quotedprice)
VALUES (12491,
       'BZ66',
       1,
       399.99);
INSERT INTO orderlines
      (orderid,
       partid,
       numberordered,
       quotedprice)
VALUES (12494,
       'CB03'.
       4,
       279.99);
INSERT INTO orderlines
      (orderid,
       partid,
       numberordered,
       quotedprice)
```

```
VALUES (12495,
       'CX11',
       2,
       22.95);
INSERT INTO orderlines
      (orderid,
       partid,
       numberordered,
       quotedprice)
VALUES (12498,
       'AZ52',
       2,
       12.95);
INSERT INTO orderlines
      (orderid,
       partid,
       numberordered,
       quotedprice)
VALUES (12500,
       'BT04',
       1,
       149.99);
INSERT INTO orderlines
      (orderid,
       partid,
       numberordered,
       quotedprice)
           (12504,
VALUES
       'CZ81',
       2,
       325.99);
```

--SELECT QUERIES

SELECT * FROM Customer ORDER BY customerid:

SELECT * FROM SalesrepResentative ORDER BY salesrepid, region;

SELECT * FROM Sales_Order ORDER BY orderid;

SELECT * FROM OrderLines ORDER BY orderid, partid;

SELECT * **FROM Part ORDER BY partid**;

OUTPUT OF EXECUTION:

Table created. Table created. Table created. Table created. Table created. 1 row(s) inserted. 1 row(s) inser

Customer

CUSTOMERID	LASTNAME	FIRSTNAME	STREETADDRESS	CITY	STATE	ZIPCODE	CURRENTBALANCE	CREDITLIMIT	SALESREPID
124	Mohnani	Payal	481 Oak	Lansing	MI	49224	818.75	1000	3
256	Waters	Cheryl	215 Pete	Grant	MI	49219	21.5	1500	6
311	Charles	Don	48 College	Ira	MI	49034	825.75	1000	12
315	Daniels	Tom	914 Cherry	Kent	MI	48391	770.75	750	6
405	Williams	Al	519 Watson	Grant	MI	49219	402.75	1500	12
412	Adams	Sally	16 Elm	Lansing	MI	49224	1817.5	2000	3
522	Nelson	Mary	108 Pine	Ada	MI	49441	98.75	1500	2
567	Dinh	Tran	808 Ridge	Harper	MI	48421	402.4	750	6
587	Galvez	Mara	512 Pine	Ada	MI	49441	114.6	1000	6
622	Martin	Dan	419 Chip	Grant	MI	49219	1045.75	1000	3

10 rows selected.

SalesRepresentative

SALESREPID	LASTNAME	FIRSTNAME	STREETADDRESS	CITY	STATE	ZIPCODE	REGION	REGIONDESCRIPTION	TOTALCOMMISSION	COMMISSIONRATE
3	Jones	Mary	123 Main	Grant	MI	48219	С	Central	2150	.05
3	Jones	Mary	123 Main	Grant	MI	48219	Е	Eastern	2150	.05
6	Smith	William	102 Raymond	Ada	MI	49441	W	Western	4912.5	.07
12	Diaz	Miguel	419 Harper	Lansing	MI	49224	SC	South Central	2150	.05
12	Diaz	Miguel	419 Harper	Lansing	MI	49224	UP	Upper Pennisula	2150	.05

5 rows selected.

Sales Order

ORDERID	ODATE	CUSTOMERID	SHIPPINGDATE
12489	02-JUL-11	124	22-JUL-11
12491	02-JUL-11	311	22-JUL-11
12494	04-JUL-11	315	12-JUL-11
12495	04-JUL-11	256	22-AUG-11
12498	05-JUL-11	522	-
12500	05-JUL-11	124	22-AUG-11
12504	05-JUL-11	522	-

7 rows selected.

Order Lines

ORDERID	PARTID	NUMBERORDERED	QUOTEDPRICE
12489	AX12	11	21.95
12491	BT04	1	149.99
12491	BZ66	1	399.99
12494	CB03	4	279.99
12495	CX11	2	22.95
12498	AZ52	2	12.95
12500	BT04	1	149.99
12504	CZ81	2	325.99

8 rows selected.

<u>Part</u>

PARTID	PARTDESCRIPTION	UNITEONHAND	PCLASS	WAREHOUSENUMBER	UNITPRICE
AX12	Iron	104	HW	3	24.95
AZ52	Dartboard	20	SW	2	12.95
BH22	Corn Popper	95	HW	3	24.95
BT04	Gas Grill	11	AP	2	149.99
BZ66	Washer	52	AP	3	39.99
CA14	Griddle	78	HW	3	39.99
CB03	Bike	44	SG	1	299.99
CX11	Blender	112	HW	3	22.95
CZ81	Treadmill	68	SG	2	349.95

9 rows selected.

References:

Oppel, A. J. (2009). Databases: A beginner's guide. New York, NY: McGraw-Hill.

Laureate Education (Producer). (2011a). Designing a database [Video file]. Baltimore, MD: Author