```
SQL> CREATE TABLE sales_data (
 2
    row_id NUMBER,
 3
    order_id VARCHAR2(30),
4
    order_date DATE,
 5
    ship_date DATE,
6
    ship_mode VARCHAR2(50),
 7
    customer_id VARCHAR2(30),
8
    customer_name VARCHAR2(100),
9
     segment VARCHAR2(50),
10
     country VARCHAR2(50),
11
     city VARCHAR2(50),
12
     state VARCHAR2(50),
13
     postal_code VARCHAR2(20),
14
     region VARCHAR2(20),
15
     product_id VARCHAR2(30),
16
     category VARCHAR2(50),
17
     sub_category VARCHAR2(50),
18
     product_name VARCHAR2(400),
19
     sales NUMBER(10,2),
20
     quantity NUMBER,
21
     discount NUMBER(5,2),
22
     profit NUMBER(10,2)
23 );
```

Table created.

## SQL> INSERT INTO sales\_data VALUES

2 (1, 'CA-2016-152156', TO\_DATE('2016-11-08','YYYY-MM-DD'), TO\_DATE('2016-11-11','YYYY-MM-DD'), 'Second Class', 'CG-12520', 'Claire Gute', 'Consumer', 'United States', 'Henderson', 'Kentucky', '42420', 'South', 'FUR-BO-10001798', 'Furniture', 'Bookcases', 'Bush Somerset Collection Bookcase', 261.96, 2, 0, 41.91);

1 row created. SQL> SQL> INSERT INTO sales\_data VALUES 2 (2, 'CA-2016-152156', TO\_DATE('2016-11-08','YYYY-MM-DD'), TO\_DATE('2016-11-11','YYYY-MM-DD') DD'), 'Second Class', 'CG-12520', 'Claire Gute', 'Consumer', 'United States', 'Henderson', 'Kentucky', '42420', 'South', 'FUR-CH-10000454', 'Furniture', 'Chairs', 'Hon Deluxe Fabric Upholstered Stacking Chairs, Rounded Back', 731.94, 3, 0, 219.58); 1 row created. SQL> SQL> INSERT INTO sales\_data VALUES 2 (3, 'CA-2016-138688', TO\_DATE('2016-12-06','YYYY-MM-DD'), TO\_DATE('2016-12-16','YYYY-MM-DD'), TO\_DATE('2016-12-16','YYY-MM-DD'), TO\_DATE('2016-12-16','YYYY-MM-DD'), TO\_DATE('2016-12-16','YYYY-MM-DD'), TO\_DATE('2016-12-16','YYYY-MM-DD'), TO\_DATE('2016-12-16','YYYY-MM-DD'), TO\_DATE('2016-12-16','YYYY-MM-DD'), TO\_DATE('2016-12-16','YYYY-MM-DD'), TO\_DATE('2016-12-16','YYYY-MM-DD'), TO\_DATE('2016-12-16','YYYY-MM-DD'), TO\_DATE('2016-12-16','YYY-MM-DD'), TO\_DATE('2016-12-16','YYYY-MM-DD'), TO\_DATE('2016-12-16','YYYY-MM-DD'), TO\_DATE('2016-12-16','YYYY-MM-DD'), TO\_DATE( DD'), 'Second Class', 'DV-13045', 'Darrin Van Huff', 'Corporate', 'United States', 'Los Angeles', 'California', '90036', 'West', 'OFF-LA-10000240', 'Office Supplies', 'Labels', 'Self-Adhesive Address Labels for Typewriters by Universal', 14.62, 2, 0, 6.87); 1 row created. SQL> SQL> INSERT INTO sales\_data VALUES 2 (4, 'US-2015-108966', TO\_DATE('2015-10-11','YYYY-MM-DD'), TO\_DATE('2015-10-18','YYYY-MM-DD') DD'), 'Standard Class', 'SO-20335', 'Sean O''Donnell', 'Consumer', 'United States', 'Fort Lauderdale', 'Florida', '33311', 'South', 'FUR-TA-10000577', 'Furniture', 'Tables', 'Bretford CR4500 Series Slim Rectangular Table', 957.58, 5, 0.45, -383.03); 1 row created. SQL> SQL> INSERT INTO sales\_data VALUES

2 (5, 'US-2015-108966', TO\_DATE('2015-10-11','YYYY-MM-DD'), TO\_DATE('2015-10-18','YYYY-MM-DD'), 'Standard Class', 'SO-20335', 'Sean O''Donnell', 'Consumer', 'United States', 'Fort Lauderdale',

'Florida', '33311', 'South', 'OFF-ST-10000760', 'Office Supplies', 'Storage', 'Eldon Fold ''N Roll Cart System', 22.37, 2, 0.2, 2.52);
1 row created.
SQL>
SQL> INSERT INTO sales_data VALUES
2 (6, 'CA-2014-115812', TO_DATE('2014-06-09','YYYY-MM-DD'), TO_DATE('2014-06-14','YYYY-MM-DD'), 'Standard Class', 'BH-11710', 'Brosina Hoffman', 'Consumer', 'United States', 'Los Angeles', 'California', '90032', 'West', 'FUR-FU-10001487', 'Furniture', 'Furnishings', 'Eldon Expressions Wood and Plastic Desk Accessories, Cherry Wood', 48.86, 7, 0, 14.17);
1 row created.
SQL>
SQL> INSERT INTO sales_data VALUES
2 (7, 'CA-2014-115812', TO_DATE('2014-06-09','YYYY-MM-DD'), TO_DATE('2014-06-14','YYYY-MM-DD'), 'Standard Class', 'BH-11710', 'Brosina Hoffman', 'Consumer', 'United States', 'Los Angeles', 'California', '90032', 'West', 'OFF-AR-10002833', 'Office Supplies', 'Art', 'Newell 322', 7.28, 4, 0, 1.97);
1 row created.
SQL>
SQL> INSERT INTO sales_data VALUES
2 (8, 'CA-2014-115812', TO_DATE('2014-06-09','YYYY-MM-DD'), TO_DATE('2014-06-14','YYYY-MM-DD'), 'Standard Class', 'BH-11710', 'Brosina Hoffman', 'Consumer', 'United States', 'Los Angeles', 'California', '90032', 'West', 'TEC-PH-10002275', 'Technology', 'Phones', 'Mitel 5320 IP Phone VoIP phone', 907.15, 6, 0.2, 90.72);
1 row created.
SQL>
SQL> INSERT INTO sales_data VALUES

2 (9, 'CA-2014-115812', TO_DATE('2014-06-09','YYYY-MM-DD'), TO_DATE('2014-06-14','YYYY-MM-DD'), 'Standard Class', 'BH-11710', 'Brosina Hoffman', 'Consumer', 'United States', 'Los Angeles', 'California', '90032', 'West', 'OFF-BI-10003910', 'Office Supplies', 'Binders', 'DXL Angle-View Binders with Locking Rings by Samsill', 18.50, 3, 0.2, 5.78);
1 row created.
SQL>
SQL> INSERT INTO sales_data VALUES
2 (10, 'CA-2014-115812', TO_DATE('2014-06-09','YYYY-MM-DD'), TO_DATE('2014-06-14','YYYY-MM-DD'), 'Standard Class', 'BH-11710', 'Brosina Hoffman', 'Consumer', 'United States', 'Los Angeles', 'California', '90032', 'West', 'OFF-AP-10002892', 'Office Supplies', 'Appliances', 'Belkin F5C206VTEL 6 Outlet Surge', 114.90, 5, 0, 34.47);
1 row created.
SQL>
SQL> INSERT INTO sales_data VALUES
2 (11, 'CA-2014-115812', TO_DATE('2014-06-09','YYYY-MM-DD'), TO_DATE('2014-06-14','YYYY-MM-DD'), 'Standard Class', 'BH-11710', 'Brosina Hoffman', 'Consumer', 'United States', 'Los Angeles', 'California', '90032', 'West', 'FUR-TA-10001539', 'Furniture', 'Tables', 'Chromcraft Rectangular Conference Tables', 1706.18, 9, 0.2, 85.31);
1 row created.
SQL>
SQL> INSERT INTO sales_data VALUES
2 (12, 'CA-2014-115812', TO_DATE('2014-06-09', 'YYYY-MM-DD'), TO_DATE('2014-06-14', 'YYYY-MM-DD'), 'Standard Class', 'BH-11710', 'Brosina Hoffman', 'Consumer', 'United States', 'Los Angeles', 'California', '90032', 'West', 'TEC-PH-10002033', 'Technology', 'Phones', 'Konftel 250 Conference phone - Charcoal black', 911.42, 4, 0.2, 68.36);
1 row created.

SQL>

SQL> INSERT INTO sales\_data VALUES

2 (13, 'CA-2017-114412', TO\_DATE('2017-04-15','YYYY-MM-DD'), TO\_DATE('2017-04-20','YYYY-MM-DD'), 'Standard Class', 'AA-10480', 'Andrew Allen', 'Consumer', 'United States', 'Concord', 'North Carolina', '28027', 'South', 'OFF-PA-10002365', 'Office Supplies', 'Paper', 'Xerox 1967', 15.55, 3, 0.2, 5.44);

1 row created.

SQL>

SQL> INSERT INTO sales\_data VALUES

2 (14, 'CA-2016-161389', TO\_DATE('2016-12-05','YYYY-MM-DD'), TO\_DATE('2016-12-10','YYYY-MM-DD'), 'Standard Class', 'IM-15070', 'Irene Maddox', 'Consumer', 'United States', 'Seattle', 'Washington', '98103', 'West', 'OFF-BI-10003656', 'Office Supplies', 'Binders', 'Fellowes PB200 Plastic Comb Binding Machine', 407.98, 3, 0.2, 132.59);

1 row created.

SQL>

SQL> INSERT INTO sales\_data VALUES

2 (15, 'US-2015-118983', TO\_DATE('2015-11-22','YYYY-MM-DD'), TO\_DATE('2015-11-26','YYYY-MM-DD'), 'Standard Class', 'HP-14815', 'Harold Pawlan', 'Home Office', 'United States', 'Fort Worth', 'Texas', '76106', 'Central', 'OFF-AP-10002311', 'Office Supplies', 'Appliances', 'Holmes Replacement Filter for HEPA Air Cleaner, Very Large Room, HEPA Filter', 68.81, 5, 0.8, -123.86);

1 row created.

SQL>

SQL> INSERT INTO sales\_data VALUES

2 (16, 'US-2015-118983', TO\_DATE('2015-11-22', 'YYYY-MM-DD'), TO\_DATE('2015-11-26', 'YYYY-MM-DD'), 'Standard Class', 'HP-14815', 'Harold Pawlan', 'Home Office', 'United States', 'Fort Worth', 'Texas', '76106', 'Central', 'OFF-BI-10000756', 'Office Supplies', 'Binders', 'Storex DuraTech Recycled Plastic Frosted Binders', 2.54, 3, 0.8, -3.82);

1 row created.

SQL>

SQL> INSERT INTO sales\_data VALUES

2 (17, 'CA-2014-105893', TO\_DATE('2014-11-11','YYYY-MM-DD'), TO\_DATE('2014-11-18','YYYY-MM-DD'), 'Standard Class', 'PK-19075', 'Pete Kriz', 'Consumer', 'United States', 'Madison', 'Wisconsin', '53711', 'Central', 'OFF-ST-10004186', 'Office Supplies', 'Storage', 'Stur-D-Stor Shelving, Vertical 5-Shelf: 72"H x 36"W x 18 1/2"D', 665.88, 6, 0, 13.32);

1 row created.

SQL>

SQL> INSERT INTO sales data VALUES

2 (18, 'CA-2014-167164', TO\_DATE('2014-05-13','YYYY-MM-DD'), TO\_DATE('2014-05-15','YYYY-MM-DD'), 'Second Class', 'AG-10270', 'Alejandro Grove', 'Consumer', 'United States', 'West Jordan', 'Utah', '84084', 'West', 'OFF-ST-10000107', 'Office Supplies', 'Storage', 'Fellowes Super Stor/Drawer', 55.50, 2, 0, 9.99);

1 row created.

SQL>

SQL> INSERT INTO sales\_data VALUES

2 (19, 'CA-2014-143336', TO\_DATE('2014-08-27', 'YYYY-MM-DD'), TO\_DATE('2014-09-01', 'YYYY-MM-DD'), 'Second Class', 'ZD-21925', 'Zuschuss Donatelli', 'Consumer', 'United States', 'San Francisco', 'California', '94109', 'West', 'OFF-AR-10003056', 'Office Supplies', 'Art', 'Newell 341', 8.56, 2, 0, 2.48);

1 row created.

SQL>

SQL> INSERT INTO sales data VALUES

2 (20, 'CA-2014-143336', TO\_DATE('2014-08-27', 'YYYY-MM-DD'), TO\_DATE('2014-09-01', 'YYYY-MM-DD'), 'Second Class', 'ZD-21925', 'Zuschuss Donatelli', 'Consumer', 'United States', 'San Francisco', 'California', '94109', 'West', 'TEC-PH-10001949', 'Technology', 'Phones', 'Cisco SPA 501G IP Phone', 213.48, 3, 0.2, 16.01);

1 row created.

#### **SQL> SELECT**

- 2 EXTRACT(YEAR FROM order\_date) AS year,
- 3 EXTRACT(MONTH FROM order\_date) AS month,
- 4 TO\_CHAR(order\_date, 'YYYY-MM') AS year\_month,
- 5 COUNT(DISTINCT order\_id) AS order\_count,
- 6 SUM(sales) AS total\_revenue
- 7 FROM sales\_data
- 8 GROUP BY EXTRACT(YEAR FROM order\_date), EXTRACT(MONTH FROM order\_date), TO\_CHAR(order\_date, 'YYYY-MM')
- 9 ORDER BY year, month;

YEAR MONTH YEAR\_MO ORDER\_COUNT TOTAL\_REVENUE

	2014	5 2014-05	1	55.5
	2014	6 2014-06	1	3714.29
	2014	8 2014-08	1	222.04
	2014	11 2014-11	1	665.88
	2015	10 2015-10	1	979.95
	2015	11 2015-11	1	71.35
	2016	11 2016-11	1	993.9
	2016	12 2016-12	2	422.6
	2017	4 2017-04	1	15.55

9 rows selected.

## SQL> SELECT

- 2 TO\_CHAR(order\_date, 'YYYY-MM') AS year\_month,
- 3 COUNT(DISTINCT order\_id) AS order\_count,
- 4 SUM(sales) AS total\_revenue
- 5 FROM sales\_data
- 6 WHERE EXTRACT(YEAR FROM order\_date) = 2016

- 7 GROUP BY TO\_CHAR(order\_date, 'YYYY-MM')
- 8 ORDER BY year\_month;

# YEAR\_MO ORDER\_COUNT TOTAL\_REVENUE

\_\_\_\_\_

2016-11 1 993.9

2016-12 2 422.6

## SQL> SELECT

- 2 TO\_CHAR(order\_date, 'Month YYYY') AS month\_year,
- 3 COUNT(DISTINCT order\_id) AS order\_count,
- 4 SUM(sales) AS total\_revenue
- 5 FROM sales\_data
- 6 GROUP BY TO\_CHAR(order\_date, 'Month YYYY')
- 7 ORDER BY total\_revenue DESC
- 8 FETCH FIRST 5 ROWS ONLY;

MONTH_YEAR	ORDER_COUNT TOTAL_REVENUE
June 2014	1 3714.29
November 2016	1 993.9
October 2015	1 979.95
November 2014	1 665.88
December 2016	2 422.6