

33. Create a query to produce the total purchase per invoice, generating the results shown in Figure P7.33. The invoice total is the sum of the product purchases in the LINE that corresponds to the INVOICE.

FIGURE P7.33 INVOICE TOTALS

INV_NUMBER	Invoice Total
1001	24.94
1002	9.98
1003	153.85
1004	34.87
1005	70.44
1006	397.83
1007	34.97
1008	399.15

34. Use a query to show the invoices and invoice totals in Figure P7.34. (*Hint:* Group by the CUS_CODE.)

FIGURE P7.34 INVOICE TOTALS BY CUSTOMER

CUS_CODE	INV_NUMBER	Invoice Total
10011	1002	9.98
10011	1004	34.87
10011	1008	399.15
10012	1003	153.85
10014	1001	24.94
10014	1006	397.83
10015	1007	34.97
10018	1005	70.44

35. Write a query to produce the number of invoices and the total purchase amounts by customer, using the output shown in Figure P7.35 as your guide. (Compare this summary to the results shown in Problem 34.)

FIGURE P7.35 NUMBER OF INVOICES AND TOTAL PURCHASE AMOUNTS BY CUSTOMER

CUS_CODE	Number of Invoices	Total Customer Purchases
10011	3	444.00
10012	1	153.85
10014	2	422.77
10015	1	34.97
10018	1	70.44

36. Using the query results in Problem 35 as your basis, write a query to generate the total number of invoices, the invoice total for all of the invoices, the smallest of the customer purchase amounts, the largest of the customer purchase amounts, and the average of all the customer purchase amounts. (*Hint:* Check the figure output in Problem 35.) Your output must match Figure P7.36.

FIGURE P7.36 NUMBER OF INVOICES, INVOICE TOTALS, MINIMUM, MAXIMUM, AND AVERAGE SALES

Total Invoices	Total Sales	Minimum Customer Purchases	Largest Customer Purchases	Average Customer Purchases
8	1126.03	34.97	444.00	225.21

37. List the balances of customers who have made purchases during the current invoice cycle—that is, for the customers who appear in the INVOICE table. The results of this query are shown in Figure P7.37.

FIGURE P7.37 BALANCES FOR CUSTOMERS WHO MADE PURCHASES

CUS_CODE	CUS_BALANCE
10011	0.00
10012	345.86
10014	0.00
10015	0.00
10018	216.55

38. Using the results of the query created in Problem 37, provide a summary of customer balance characteristics, as shown in Figure P7.38.

FIGURE P7.38 BALANCE SUMMARY OF CUSTOMERS WHO MADE PURCHASES

Minimum Balance	Maximum Balance	Average Balance
0	345.86	112.48

39. Create a query to find the balance characteristics for all customers, including the total of the outstanding balances. The results of this query are shown in Figure P7.39.

FIGURE P7.39 BALANCE SUMMARY FOR ALL CUSTOMERS

Total Balances	Minimum Balance	Maximum Balance	Average Balance
2089.28	0.00	768.93	208.93

40. Find the listing of customers who did not make purchases during the invoicing period. Your output must match the output shown in Figure P7.40.

FIGURE P7.40 BALANCES OF CUSTOMERS WHO DID NOT MAKE PURCHASES

CUS_CODE	CUS_BALANCE
10010	0.00
10013	536.75
10016	221.19
10017	768.93
10019	0.00

41. Find the customer balance summary for all customers who have not made purchases during the current invoicing period. The results are shown in Figure P7.41.

FIGURE P7.41 SUMMARY OF CUSTOMER BALANCES FOR CUSTOMERS WHO DID NOT MAKE PURCHASES

Total Balance	Minimum Balance	Maximum Balance	Average Balance
1526.87	0.00	768.93	305.37

42. Create a query that summarizes the value of products currently in inventory. Note that the value of each product is a result of multiplying the units currently in inventory by the unit price. Use the ORDER BY clause to match the order shown in Figure P7.42.

FIGURE P7.42 VALUE OF PRODUCTS CURRENTLY IN INVENTORY

P_DESCRPT	P_QOH	P_PRICE	Subtotal
Hicut chain saw, 16 in.	11	256.99	2826.89
Steel matting, 4'x8'x1/6", .5" mesh	18	119.95	2159.10
2.5-in. wd. screw, 50	237	8.45	2002.65
1.25-in. metal screw, 25	172	6.99	1202.28
PVC pipe, 3.5-in., 8-ft	188	5.87	1103.56
Hrd. cloth, 1/2-in., 3x50	23	43.99	1011.77
Power painter, 15 psi, 3-nozzle	8	109.99	879.92
B&D jigsaw, 12-in. blade	8	109.92	879.36
Hrd. cloth, 1/4-in., 2x50	15	39.95	599.25
B&D jigsaw, 8-in. blade	6	99.87	599.22
7.25-in. pwr. saw blade	32	14.99	479.68
B&D cordless drill, 1/2-in.	12	38.95	467.40
9.00-in. pwr. saw blade	18	17.49	314.82
Claw hammer	23	9.95	228.85
Rat-tail file, 1/8-in. fine	43	4.99	214.57
Sledge hammer, 12 lb.	8	14.40	115.20

43. Using the results of the query created in Problem 42, find the total value of the product inventory. The results are shown in Figure P7.43.

FIGURE P7.43 TOTAL VALUE OF ALL PRODUCTS IN INVENTORY

Total Value of Inventory
15084.52

The Ch07_LargeCo database (see Figure P7.44) stores data for a company that sells paint products. The company tracks the sale of products to customers. The database keeps data on customers (LGCUSTOMER), sales (LGINVOICE), products (LGPRODUCT), which products are on which invoices (LGLINE), employees (LGEMPLOYEE), the salary history of each employee (LGSALARY-HISTORY), departments (LGDEPARTMENT), product brands (LGBRAND), vendors (LGVENDOR), and which vendors supply each product (LGSUPPLIES). Some of the tables contain only a few rows of data, while other tables are quite large; for example, there are only eight departments, but more than 3,300 invoices containing over 11,000 invoice lines. For Problems 45–64, a figure of the correct output for each problem is provided. If the output of the query is very large, only the first several rows of the output are shown.

Online Content

Problems 44–64 are based on the Ch07_LargeCo database, which is available at www.cengagebrain.com. This database is stored in Microsoft Access format. Oracle, MySQL, and MS SQL Server script files are available at www.cengagebrain.com.