Assignment 8

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51. The Binder Prime Company wants to recognize the employee who sold the most of its products during a specified period. Write a query to display the employee number, employee first name, employee last name, email address, and total units sold for the employee who sold the most Binder Prime brand products between November 1, 2015, and December 5, 2015. If there is a tie for most units sold, sort the output by employee last name

Answer:

SELECT EMP.EMP\_NUM, EMP\_FNAME,EMP\_LNAME, EMP\_EMAIL, TOTAL

FROM LGEMPLOYEE AS EMP INNER JOIN

(SELECT EMPLOYEE\_ID, SUM(LINE\_QTY) AS TOTAL

FROM LGINVOICE AS I INNER JOIN LGLINE AS L ON I.INV\_NUM = L.INV\_NUM

INNER JOIN LGPRODUCT AS P ON L.PROD\_SKU = P.PROD\_SKU

INNER JOIN LGBRAND AS B ON B.BRAND\_ID = P.BRAND\_ID

WHERE BRAND\_NAME = 'BINDER PRIME'

AND INV\_DATE BETWEEN '2017-11-01' AND '2017-12-06'

GROUP BY EMPLOYEE\_ID) AS SUB

ON EMP.EMP\_NUM = SUB.EMPLOYEE\_ID

WHERE TOTAL = (SELECT MAX(TOTAL)

FROM (SELECT EMPLOYEE\_ID, SUM(LINE\_QTY) AS TOTAL

FROM LGINVOICE AS I INNER JOIN LGLINE AS L ON I.INV\_NUM = L.INV\_NUM

INNER JOIN LGPRODUCT AS P ON L.PROD\_SKU = P.PROD\_SKU

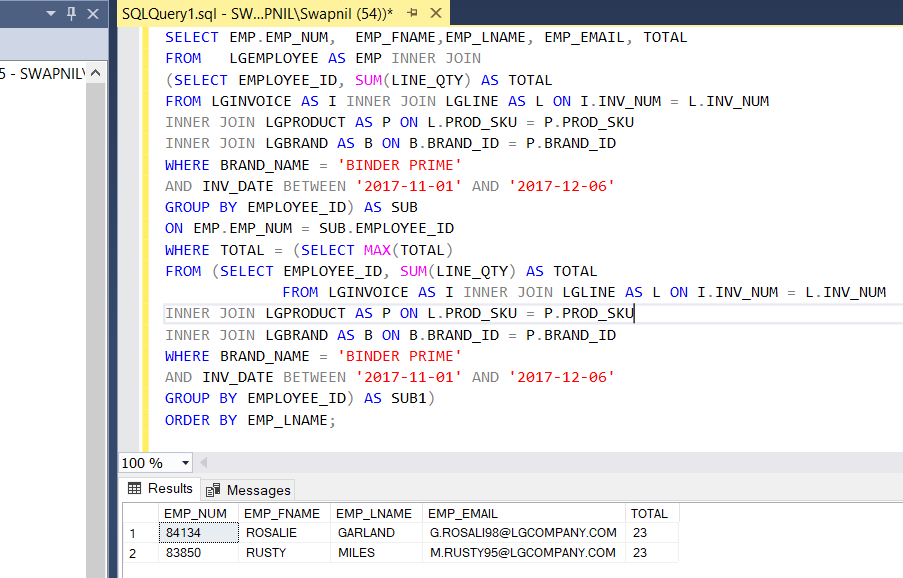
INNER JOIN LGBRAND AS B ON B.BRAND\_ID = P.BRAND\_ID

WHERE BRAND\_NAME = 'BINDER PRIME'

AND INV\_DATE BETWEEN '2017-11-01' AND '2017-12-06'

GROUP BY EMPLOYEE\_ID) AS SUB1)

ORDER BY EMP\_LNAME;



52. Write a query to display the customer code, first name, and last name of all customers who have had at least one invoice completed by employee 83649 and at least one invoice completed by employee 83677. Sort the output by customer last name and then first name (Figure P7.52).

Answer:

SELECT DISTINCT F1.CUST\_CODE, F1.CUST\_FNAME, F1.CUST\_LNAME

FROM (SELECT C.CUST\_CODE, C.CUST\_FNAME, C.CUST\_LNAME

FROM LGCUSTOMER C, LGINVOICE I

WHERE C.CUST\_CODE=I.CUST\_CODE AND EMPLOYEE\_ID=83649)F1,

(SELECT C.CUST\_CODE, C.CUST\_FNAME, C.CUST\_LNAME

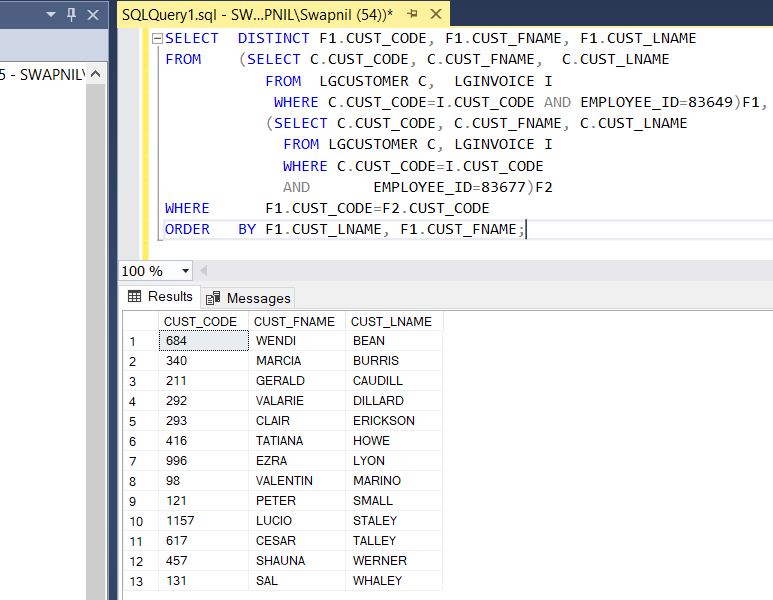
FROM LGCUSTOMER C, LGINVOICE I

WHERE C.CUST\_CODE=I.CUST\_CODE

AND EMPLOYEE\_ID=83677)F2

WHERE F1.CUST\_CODE=F2.CUST\_CODE

ORDER BY F1.CUST\_LNAME, F1.CUST\_FNAME;



53. LargeCo is planning a new promotion in Alabama (AL) and wants to know about the largest purchases made by customers in that state. Write a query to display the customer code, customer first name, last name, full address, invoice date, and invoice total of the largest purchase made by each customer in Alabama. Be certain to include any customers in Alabama who have never made a purchase; their invoice dates should be NULL and the invoice totals should display as 0. Sort the results by customer last name and then first name (Figure P7.53).

Answer:

SELECT C.CUST\_CODE, C.CUST\_FNAME, C.CUST\_LNAME, C.CUST\_STREET, C.CUST\_CITY, C.CUST\_STATE, C.CUST\_ZIP, I.INV\_DATE, I.INV\_TOTAL AS 'LARGEST INVOICE'

FROM LGCUSTOMER C, LGINVOICE I

WHERE I.CUST\_CODE = C.CUST\_CODE

AND C.CUST\_STATE = 'AL'

AND I.INV\_TOTAL = (SELECT MAX(I2.INV\_TOTAL) FROM LGINVOICE I2 WHERE I2.CUST\_CODE =

C.CUST\_CODE)

UNION

SELECT C2.CUST\_CODE, C2.CUST\_FNAME, C2.CUST\_LNAME, C2.CUST\_STREET, C2.CUST\_CITY,

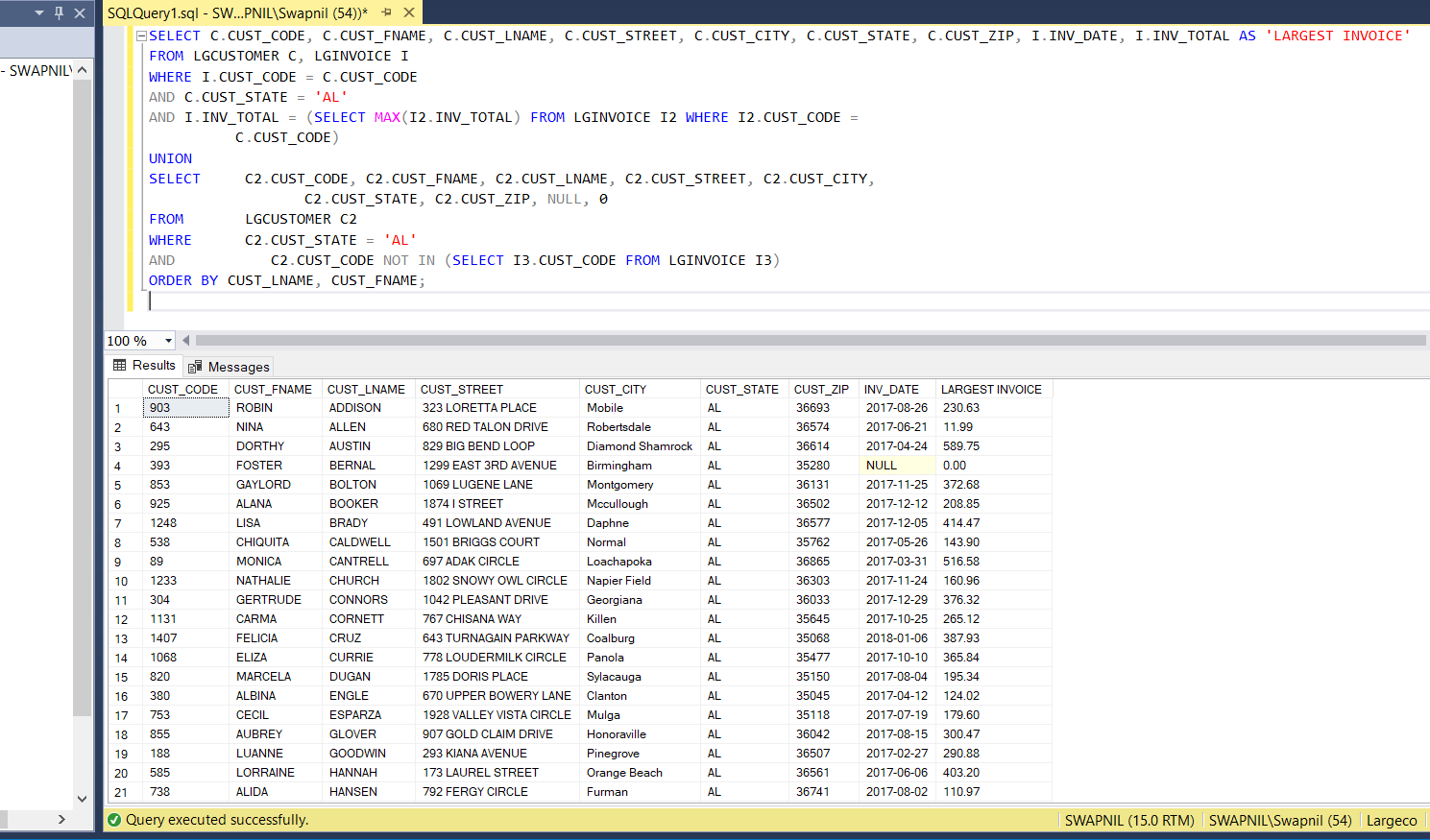
C2.CUST\_STATE, C2.CUST\_ZIP, NULL, 0

FROM LGCUSTOMER C2

WHERE C2.CUST\_STATE = 'AL'

AND C2.CUST\_CODE NOT IN (SELECT I3.CUST\_CODE FROM LGINVOICE I3)

ORDER BY CUST\_LNAME, CUST\_FNAME;



54. One of the purchasing managers is interested in the impact of product prices on the sale of products of each brand. Write a query to display the brand name, brand type, average price of products of each brand, and total units sold of products of each brand. Even if a product has been sold more than once, its price should only be included once in the calculation of the average price. However, you must be careful because multiple products of the same brand can have the same price, and each of those products must be included in the calculation of the brand’s average price. Sort the result by brand name (Figure P7.54).

Answer:

SELECT F1.BRAND\_NAME, F1.BRAND\_TYPE, ROUND(F1.AVERAGE\_PRICE,2) AS AVGPRICE, F2.AMT\_SOLD AS UNITS\_SOLD

FROM ( SELECT B.BRAND\_NAME AS BRAND\_NAME, B.BRAND\_TYPE AS BRAND\_TYPE, B.BRAND\_ID AS BRAND\_ID, (SUM(P.PROD\_PRICE)/COUNT(DISTINCT P.PROD\_SKU)) AS AVERAGE\_PRICE

FROM LGPRODUCT P, LGBRAND B

WHERE B.BRAND\_ID=P.BRAND\_ID

GROUP BY B.BRAND\_ID

ORDER BY B.BRAND\_NAME)F1,

(SELECT B.BRAND\_ID AS BRAND\_ID, SUM(L.LINE\_QTY) AS AMT\_SOLD

FROM LGBRAND B, LGLINE L, LGPRODUCT P

WHERE B.BRAND\_ID=P.BRAND\_ID

AND P.PROD\_SKU=L.PROD\_SKU

GROUP BY B.BRAND\_ID

ORDER BY B.BRAND\_NAME)F2

WHERE F1.BRAND\_ID=F2.BRAND\_ID;

55.The purchasing manager is still concerned about the impact of price on sales. Write a query to display the brand name, brand type, product SKU, product description, and price of any products that are not a premium brand, but that cost more than the most expensive premium brand products (Figure P7.55).

Answer:

SELECT B.BRAND\_NAME AS BRAND\_NAME, B.BRAND\_TYPE AS BRAND\_TYPE, P.PROD\_SKU AS PROD\_SKU, P.PROD\_DESCRIPT, P.PROD\_PRICE AS PROD\_PRICE

FROM LGBRAND B, LGPRODUCT P

WHERE B.BRAND\_ID=P.BRAND\_ID

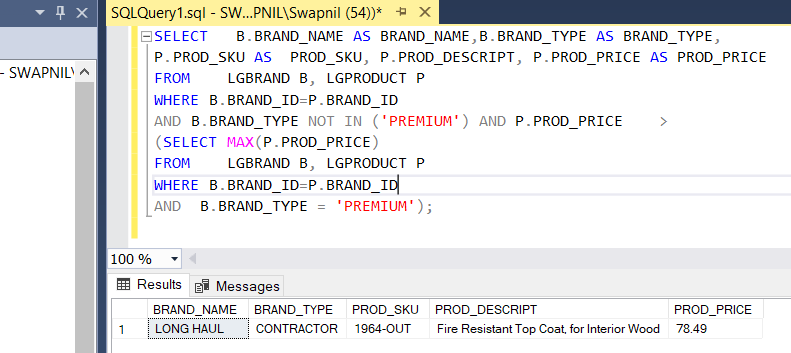
AND B.BRAND\_TYPE NOT IN ('PREMIUM') AND P.PROD\_PRICE >

(SELECT MAX(P.PROD\_PRICE)

FROM LGBRAND B, LGPRODUCT P

WHERE B.BRAND\_ID=P.BRAND\_ID

AND B.BRAND\_TYPE = 'PREMIUM');



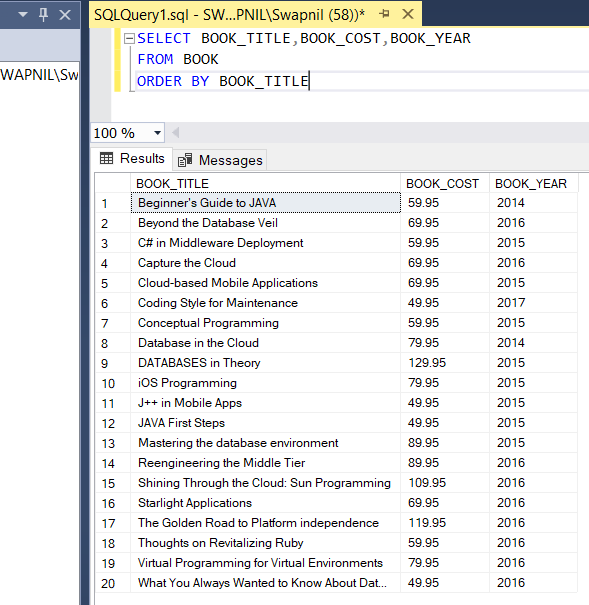
56. Write a query that displays the book title, cost and year of publication for every book in the system. Sort the results by book title.

Answer:

SELECT BOOK\_TITLE,BOOK\_COST,BOOK\_YEAR

FROM BOOK

ORDER BY BOOK\_TITLE



57. Write a query that displays the first and last name of every patron, sorted by last name and then first name. Ensure the sort is case insensitive (Figure P7.57). (50 rows)

Answer:

SELECT PAT\_FNAME,PAT\_LNAME

FROM PATRON

ORDER BY PAT\_LNAME,PAT\_FNAME



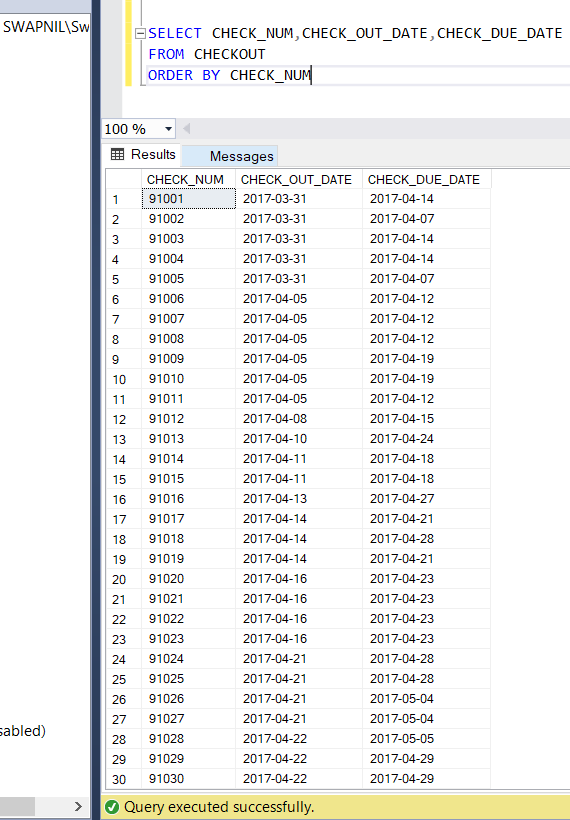
58. Write a query to display the checkout number, checkout date, and due date for every book that has been checked out sorted by checkout number (Figure P7.58). (68 rows)

Answer:

SELECT CHECK\_NUM,CHECK\_OUT\_DATE,CHECK\_DUE\_DATE

FROM CHECKOUT

ORDER BY CHECK\_NUM



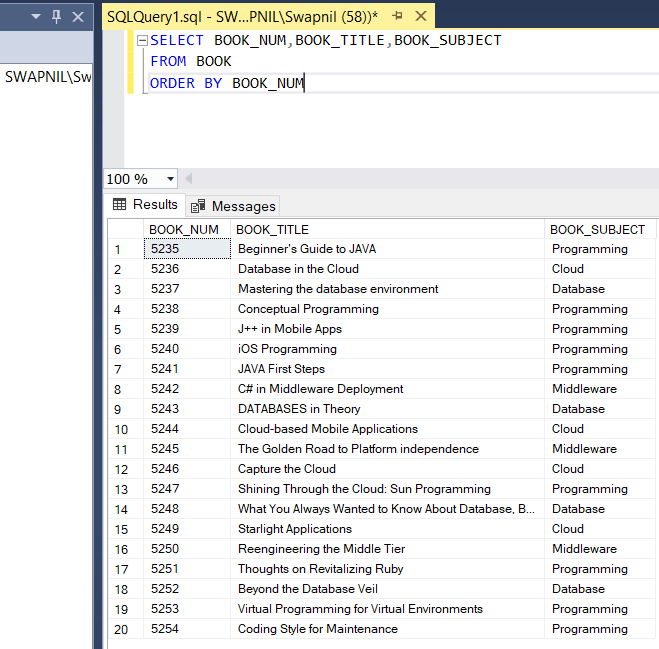
59. Write a query to display the book number, book title, and subject for every book sorted by book number (Figure P7.59). (20 rows)

Answer:

SELECT BOOK\_NUM,BOOK\_TITLE,BOOK\_SUBJECT

FROM BOOK

ORDER BY BOOK\_NUM

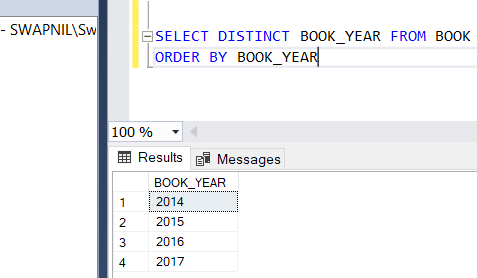


60. Write a query to display the different years in which books have been published. Include each year only once and sort the results by year (Figure P7.60).

Answer:

SELECT DISTINCT BOOK\_YEAR FROM BOOK

ORDER BY BOOK\_YEAR



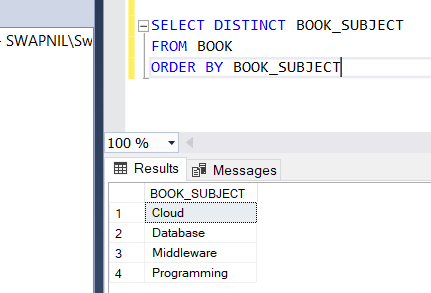
61.Write a query to display the different subjects on which FACT has books. Include each subject only once and sort the results by subject (Figure P7.61).

Answer:

SELECT DISTINCT BOOK\_SUBJECT

FROM BOOK

ORDER BY BOOK\_SUBJECT



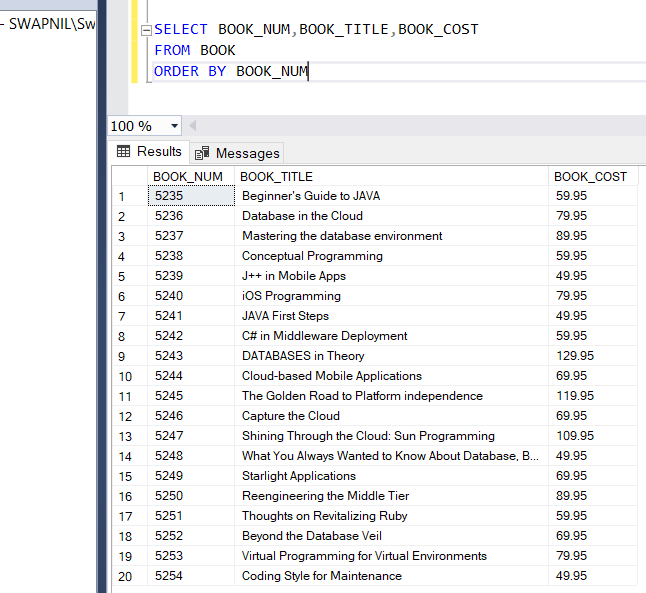
62.Write a query to display the book number, title, and cost of each book sorted by book number (Figure P7.62).

Answer:

SELECT BOOK\_NUM,BOOK\_TITLE,BOOK\_COST

FROM BOOK

ORDER BY BOOK\_NUM



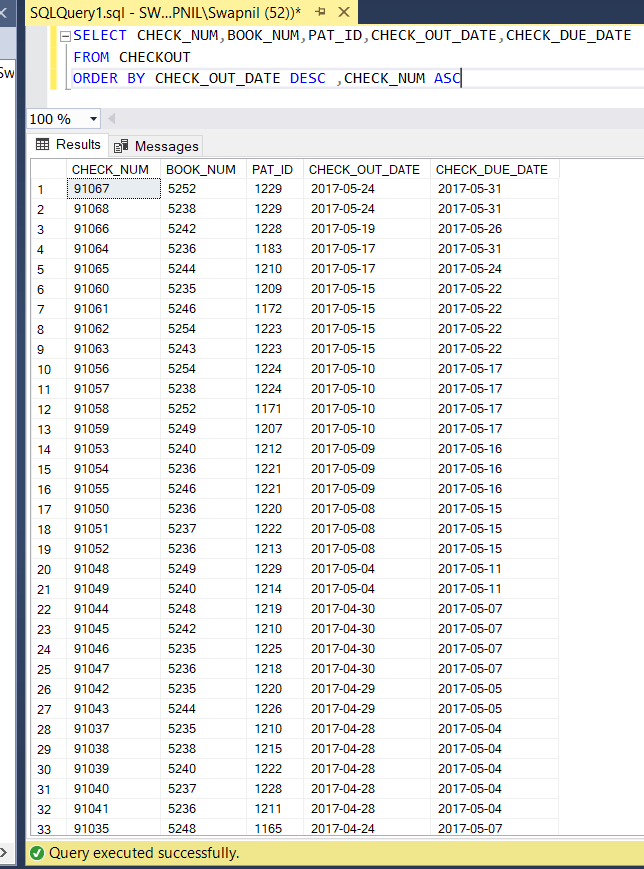
63. Write a query to display the checkout number, book number, patron ID, checkout date, and due date for every checkout that has ever occurred in the system. Sort the results by checkout date in descending order and then by checkout number in ascending order (Figure P7.63). (68 rows)

Answer:

SELECT CHECK\_NUM,BOOK\_NUM,PAT\_ID,CHECK\_OUT\_DATE,CHECK\_DUE\_DATE

FROM CHECKOUT

ORDER BY CHECK\_OUT\_DATE DESC ,CHECK\_NUM ASC



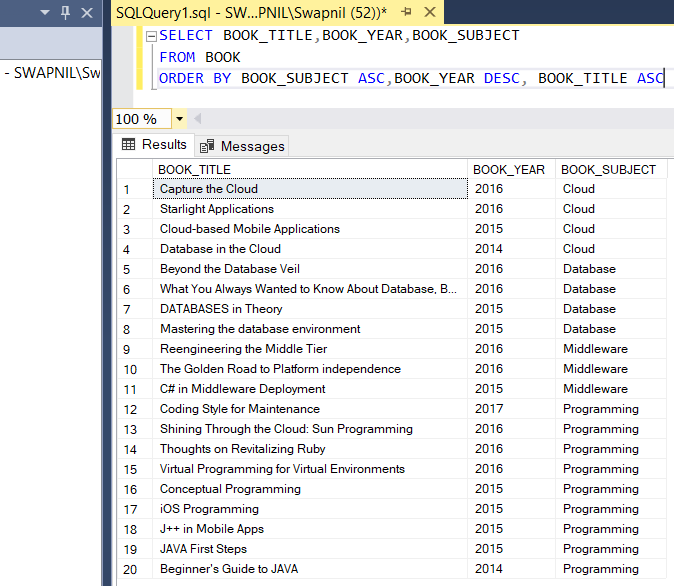
64. Write a query to display the book title, year, and subject for every book. Sort the results by book subject in ascending order, year in descending order, and then title in ascending order (Figure P7.64). (20 rows)

Answer:

SELECT BOOK\_TITLE,BOOK\_YEAR,BOOK\_SUBJECT

FROM BOOK

ORDER BY BOOK\_SUBJECT ASC,BOOK\_YEAR DESC, BOOK\_TITLE ASC



65. Write a query to display the book number, title, and cost for all books that cost $59.95 sorted by book number (Figure P7.65).

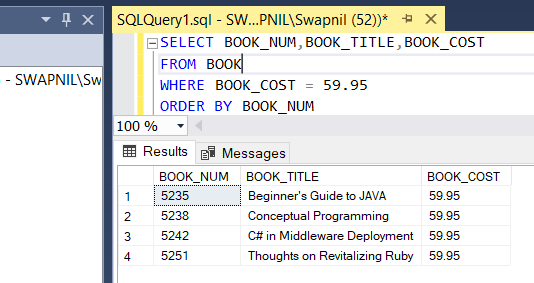
Answer:

SELECT BOOK\_NUM,BOOK\_TITLE,BOOK\_COST

FROM BOOK

WHERE BOOK\_COST = 59.95

ORDER BY BOOK\_NUM



66. Write a query to display the book number, title, and replacement cost for all books in the “Database” subject sorted by book number (Figure P7.66).

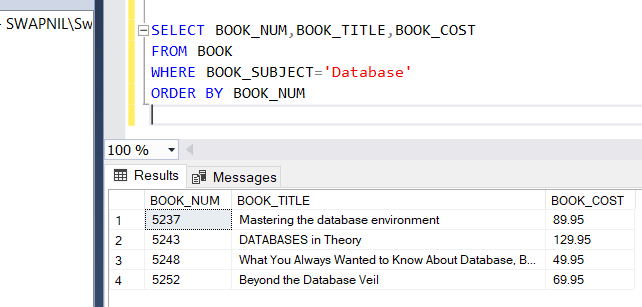
Answer:

SELECT BOOK\_NUM,BOOK\_TITLE,BOOK\_COST

FROM BOOK

WHERE BOOK\_SUBJECT='Database'

ORDER BY BOOK\_NUM



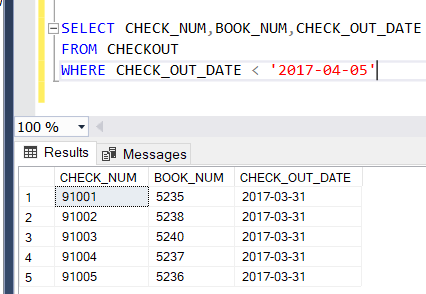
67. Write a query to display the checkout number, book number, and checkout date of all books checked out before April 5, 2017 sorted by checkout number (Figure P7.67).

Answer:

SELECT CHECK\_NUM,BOOK\_NUM,CHECK\_OUT\_DATE

FROM CHECKOUT

WHERE CHECK\_OUT\_DATE < '2017-04-05'



68. Write a query to display the book number, title, and year of all books published after 2015 and on the “Programming” subject sorted by book number (Figure P7.68).

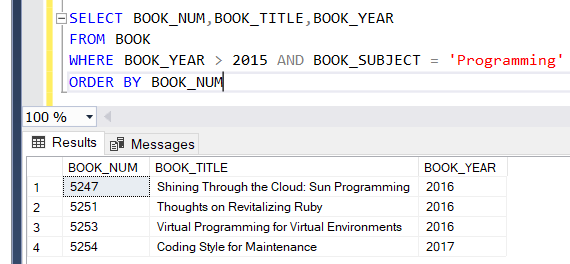
Answer:

SELECT BOOK\_NUM,BOOK\_TITLE,BOOK\_YEAR

FROM BOOK

WHERE BOOK\_YEAR > 2015 AND BOOK\_SUBJECT = 'Programming'

ORDER BY BOOK\_NUM



69.Write a query to display the book number, title, subject, and cost for all books that are on the subjects of “Middleware” or “Cloud,” and that cost more than $70 sorted by book number (Figure P7.69).

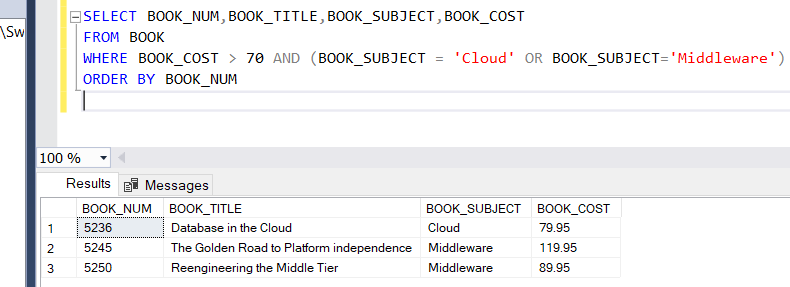
Answer:

SELECT BOOK\_NUM,BOOK\_TITLE,BOOK\_SUBJECT,BOOK\_COST

FROM BOOK

WHERE BOOK\_COST > 70 AND (BOOK\_SUBJECT = 'Cloud' OR BOOK\_SUBJECT='Middleware')

ORDER BY BOOK\_NUM



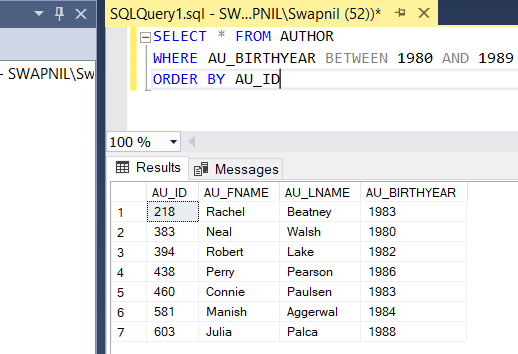
70.Write a query to display the author ID, first name, last name, and year of birth for all authors born in the decade of the 1980s sorted by author ID (Figure P7.70).

Answer:

SELECT \* FROM AUTHOR

WHERE AU\_BIRTHYEAR BETWEEN 1980 AND 1989

ORDER BY AU\_ID



**Leet Code Example**

Write a SQL query for a report that provides the following information for each person in the Person table, regardless of if there is an address for each of those people:

select p.Firstname,p.Lastname,a.City,a.State

from Person as p

left join Address as a

on p.PersonId = a.PersonID

