ACIT 1630

Relational Database Design and SQL

Lab Exercise

Lesson 10

For each question, write the SQL statements required to generate the required results using the **pubs** database.

1. List the distinct store ids and order number from the sales table where the order is greater than or equal to January 1, 1994. The query should produce the result set listed below.

stor\_id ord\_num

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6380 6871

6380 722a

7066 QA7442.3

7067 D4482

7131 N914008

7131 N914014

8042 423LL922

8042 423LL930

(8 row(s) affected)

select stor\_id, ord\_num

    from sales

    where (ord\_date >= '1994-01-01')

1. List all employees with job id equals to 5 or 10, and job level is greater than 170.

emp\_id fname lname job\_id job\_lvl

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CFH28514M Carlos Hernadez 5 211

JYL26161F Janine Labrune 5 172

LAL21447M Laurence Lebihan 5 175

RBM23061F Rita Muller 5 198

MJP25939M Maria Pontes 5 246

(5 row(s) affected)

select emp\_id, fname, lname, job\_id, job\_lvl

    from employee

    where (job\_id = '5' or job\_id = '10') and (job\_lvl > 170)

1. List all employees with job id equals to 5, or 10 and job level is greater than 170.

emp\_id fname lname job\_id job\_lvl

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PXH22250M Paul Henriot 5 159

CFH28514M Carlos Hernadez 5 211

JYL26161F Janine Labrune 5 172

LAL21447M Laurence Lebihan 5 175

RBM23061F Rita Muller 5 198

SKO22412M Sven Ottlieb 5 150

MJP25939M Maria Pontes 5 246

(7 row(s) affected)

select emp\_id, fname, lname, job\_id, job\_lvl

    from employee

    where (job\_id = '5' or job\_id = '10' and (job\_lvl > 170))

1. Which discount types do not apply to any store?

discounttype

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Initial Customer

Volume Discount

(2 row(s) affected)

select discounttype

from discounts

where (stor\_id  is null)

1. List the authors who have their phone numbers with the 415 area code. Order the list in ascending order of the last name.

au\_lname au\_fname phone

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Bennet Abraham 415 658-9932

Carson Cheryl 415 548-7723

Dull Ann 415 836-7128

Green Marjorie 415 986-7020

Hunter Sheryl 415 836-7128

Karsen Livia 415 534-9219

Locksley Charlene 415 585-4620

MacFeather Stearns 415 354-7128

Straight Dean 415 834-2919

Stringer Dirk 415 843-2991

Yokomoto Akiko 415 935-4228

(11 row(s) affected)

select au\_fname, au\_lname, phone

from authors

where (SUBSTRING(phone, 1, 3) = '415')

order by au\_lname

1. List the name, city, and state from the authors table where the state is KS or UT. Format the name of the author as the first letter of first name followed by a space followed by the last name. Format the city as the city followed by a comma followed by a space followed by the state. Order the result set by the name. The query should produce the result set listed below.

name city

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A Ringer Salt Lake City, UT

A Ringer Salt Lake City, UT

M Smith Lawrence, KS

(3 row(s) affected)

select concat(SUBSTRING(au\_fname, 1, 1), ' ', au\_lname) as name,

CONCAT(city,', ', state) as city

from authors

where (state = 'KS') or (state = 'UT')

order by name

1. List the title id, royalty, publishing date, and notes from the titles table where the price is greater than or equal to **$15.00**, and the year to date sales is greater than or equal to **4000**. Display only the **first 30** characters of the notes. Place the symbol **‘%‘** after each royalty amount in the result set. Display the publisher date in the format of **DD-MM-YYYY**. Order the result set by the title. The query should produce the result set listed below.

title\_id royalty pubdate notes

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PC1035 16% 30-06-1991 A survey of software for the n

PS3333 10% 12-06-1991 What happens when the data run

PC8888 10% 12-06-1994 Muckraking reporting on the wo

BU7832 10% 22-06-1991 Annotated analysis of what com

BU1032 10% 12-06-1991 An overview of available datab

(5 row(s) affected)

select title\_id, concat(royalty, '%') as 'royalty',

convert(varchar(10), pubdate, 105) as 'pubdate', substring(notes, 1, 30) as 'notes'

from titles

where (price >= '15.00') and (ytd\_sales >= 4000)

order by title\_id

1. List the first name, last name, and hire date from the employee table for employees with a hire year of **1993**. Format the name as the last name followed by a comma followed by a space followed by the first name. Display the hire date in the format of **MON DD YYYY**. Order the result set by the name of the employee. The query should produce the result set listed below.

name hire\_date

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Domingues, Anabela Jan 27 1993

Henriot, Paul Aug 19 1993

Ibsen, Palle May 9 1993

Koskitalo, Pirkko Nov 29 1993

Muller, Rita Oct 9 1993

Nagy, Helvetius Mar 19 1993

Saveley, Mary Jun 29 1993

(7 row(s) affected)

select CONCAT(lname,', ', fname) as 'name',

convert(varchar(12), hire\_date, 109) as 'hire\_date'

from employee

where (SUBSTRING(CONVERT(varchar(12), hire\_date, 112), 1, 4) = '1993')

1. List the title id, title, price, and calculated new price from the titles table where the type is **business** **or** **psychology**. To calculate the new price, multiply **3%** to the current price. The query should produce the result set listed below.

title\_id title price new\_price

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BU1032 The Busy Executive's Database Guide 19.99 20.590000

BU1111 Cooking with Computers: Surreptitious Balance Sheets 11.95 12.310000

BU2075 You Can Combat Computer Stress! 2.99 3.080000

BU7832 Straight Talk About Computers 19.99 20.590000

PS1372 Computer Phobic AND Non-Phobic Individuals: Behavior Variations 21.59 22.240000

PS2091 Is Anger the Enemy? 10.95 11.280000

PS2106 Life Without Fear 7.00 7.210000

PS3333 Prolonged Data Deprivation: Four Case Studies 19.99 20.590000

PS7777 Emotional Security: A New Algorithm 7.99 8.230000

(9 row(s) affected)

select title\_id, title, price, round((price \* 1.03), 2) as new\_price

from titles

where (type = 'business' or type = 'psychology')

1. List all employees that have been with the company more than 25 years. Create the output as follows with the same column names. (The years will be different in your output!)

Name Years with Company

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Helen Bennett 26

Philip Cramer 26

Carlos Hernadez 26

Yoshi Latimer 26

Patricia McKenna 26

Timothy O'Rourke 27

Manuel Pereira 26

Maria Pontes 26

Margaret Smith 27

Howard Snyder 27

Gary Thomas 27

(11 row(s) affected)

select CONCAT(fname, ' ', lname) as name,

2022 - SUBSTRING(CONVERT(varchar(12), hire\_date, 112), 1, 4) as years

from employee

where (hire\_date <= getdate())

order by years