```
/*
Noah Zhou
CNIT 272 Fall 2023
Lab Time: Friday 7:30 AM - 9:20 AM
*****************
*****
--Ouestion 1
/*
Use the FOOD SUPPLIER and FOOD tables from the LunchesDB for the
following questions.
A) List the supplier ID, supplier name, description, price upcharge, and
price for all food supplied.
 ☐ Use an INNER JOIN
 ☐ Order by the supplier name
 \square 35 rows selected.
B) List the supplier ID, supplier name, description, price upcharge, and
price for all food supplied
    from suppliers with their food items including cheese. Include
records of the suppliers
    providing stocks with 'Cheese' to the organization (the price
upcharge will be null in the result set).
 ☐ Use a LEFT JOIN
  \square 5 rows selected.
C) List the supplier ID, supplier name, description, price upcharge, and
price for only suppliers
    who have provided items with 'Cheese' that have charged increased
rates to the organization.
  \hfill \square Use a LEFT JOIN and include a WHERE clause to find non-null values of
upcharges from the FOOD table
 \square 1 row selected.
* /
--Question 1-A
SELECT f.supplier id, supplier name, description, price upcharge, price
FROM food supplier fs INNER JOIN food f
ON fs.supplier id = f.supplier id
ORDER BY supplier name;
--Question 1-B
SELECT f.supplier id, supplier name, description, price upcharge, price
FROM food_supplier fs LEFT JOIN food f
ON fs.supplier id = f.supplier id
WHERE description LIKE '%Cheese%';
ORDER BY supplier name;
--Question 1-C
SELECT f.supplier id, supplier name, description, price upcharge, price
FROM food supplier fs LEFT JOIN food f
ON fs.supplier id = f.supplier id
WHERE description LIKE '%Cheese%' AND price_upcharge IS NOT NULL;
```

/* Results: [Question 1-A] SUP SUPPLIER_NAME PRICE	DESCRIPTION	
Ard Arnoldo Deli	PB Cookie	
1.25 Ard Arnoldo Deli 5.25	Chicken Avocado Wrap	
Ard Arnoldo Deli	Veggie Pizza	
6.25 Blu Blue Sky Deli 7.5	Turkey Club	.5
Blu Blue Sky Deli	Chips	
Crm Crystal Market	Ham Melt	.3
Crm Crystal Market	Grilled Cheese	. 4
5.25 Crm Crystal Market	Philly Melt	.7
8.6 Crm Crystal Market 4	Wheat Bagel	.25
Dpz Downtowner Pizza 1	Dinner Roll	.25
Dpz Downtowner Pizza 8.5	Cheese Pizza	
SUP SUPPLIER_NAME PRICE	DESCRIPTION	PRICE_UPCHARGE
Dpz Downtowner Pizza Sauce	Cheese .75	
Foi Fontinas Italian	Apple Pie	
4.5 Foi Fontinas Italian 4.75	Barley Soup	.2
Foi Fontinas Italian	French Fries	
1.5 Foi Fontinas Italian 4	Broccoli Salad	.05
Gls Great Lakes Station 1.25	Breadstick	
Gls Great Lakes Station 4.95	Mango Smoothie	
Gls Great Lakes Station 3.5	Sugar Cookie	.5
Hsd Harper Street Deli	Yellow Cake	.5

4.5

Hsd Harper Street Deli	Chicken Soup	
4.25 Hsd Harper Street Deli	Chef Salad	.25
5.75		
SUP SUPPLIER_NAME PRICE	DESCRIPTION	PRICE_UPCHARGE
Hsd Harper Street Deli	Protein Box	.5
Jmd Jebston Montrose Deli 6.25	Potato Soup	
Jmd Jebston Montrose Deli 8	Mushroom Pizza	.15
Jmd Jebston Montrose Deli 1.5	Cole Slaw	.5
Jmd Jebston Montrose Deli 2.85	Iced Tea	.15
Jd6 Justin's Deli at 652	Brownie	.25
Jd6 Justin's Deli at 652 2.25	Soda	.25
Jd6 Justin's Deli at 652	Coffee	.15
Lak Lakeshore Bakery 5.5	Caprese	.5
Lak Lakeshore Bakery 2.35	Cheese Stick	
Lak Lakeshore Bakery 6.25	Spinach Salad	
SUP SUPPLIER_NAME PRICE	DESCRIPTION	_
Lss Lucias Sub Shop 4.85	Veggie Soup	
Lss Lucias Sub Shop 5.95	Grilled Cheese	
35 rows selected.		
[Question 1-B] SUP SUPPLIER_NAME PRICE	DESCRIPTION	_
Crm Crystal Market 5.25	Grilled Cheese	. 4
Dpz Downtowner Pizza 8.5	Cheese Pizza	
Dpz Downtowner Pizza Sauce	Cheese .75	

```
Cheese Stick
Lak Lakeshore Bakery
2.35
Lss Lucias Sub Shop
                               Grilled Cheese
5.95
[Question 1-C]
SUP SUPPLIER NAME
                               DESCRIPTION PRICE UPCHARGE
Crm Crystal Market
                               Grilled Cheese
                                                              . 4
5.25
* /
******************
--Ouestion 2
List the supplier ID, food description, and total quantity (Hint: Use
SUM) for each supplied food item.
 If the food item has never been purchased, still list the supplier ID
and description.
 Group by supplier ID and description. Sort by Description.
A) Use LEFT JOIN
 ☐ The relationship includes a composite primary key connection in the
FROM clause.
 ☐ 35 rows selected
B) Change the LEFT JOIN to an INNER JOIN and rerun it. Explain the
difference and
   what is missing in the result set. What causes the difference?
 ☐ 31 rows selected
*/
--Question 2-A
SELECT li.supplier id, description, SUM(quantity) AS TotalQuantity
FROM food f LEFT JOIN lunch item li
ON f.supplier id = li.supplier id AND f.product code = li.product code
GROUP BY li.supplier id, description;
ORDER BY description;
--Question 2-B
SELECT li.supplier id, description, SUM(quantity) AS TotalQuantity
FROM food f INNER JOIN lunch item li
ON f.supplier id = li.supplier id AND f.product code = li.product code
GROUP BY li.supplier id, description
ORDER BY description;
Results:
[Question 2-A]
                  TOTALQUANTITY
SUP DESCRIPTION
Foi Apple Pie
                                  3
Foi Barley Soup
```

Foi Jd6 Lak Dpz Dpz Lak	Breadstick Broccoli Salad Brownie Caprese Cheese Pizza Cheese Sauce Cheese Stick Chef Salad Chicken Avocado Wrap	1 10 2 4 2 5
SUP	DESCRIPTION	TOTALQUANTITY
Blu	Chicken Soup Chips Coffee Cole Slaw	13 2 6
Foi Crm Lss Crm	Dinner Roll French Fries Grilled Cheese Grilled Cheese Ham Melt Iced Tea Mango Smoothie	8 11 7 4 10
SUP	DESCRIPTION	TOTALQUANTITY
Jmd	Mushroom Pizza PB Cookie	3
Jmd Hsd Jd6 Lak Gls Blu Ard	Philly Melt Potato Soup Protein Box Soda Spinach Salad Sugar Cookie Turkey Club Veggie Pizza Veggie Soup	12 1 2 25 2 9 1 4 2
SUP	DESCRIPTION	TOTALQUANTITY
	Wheat Bagel Yellow Cake	1 6
35 ı	cows selected.	
SUP Foi Foi Gls Foi Jd6	DESCRIPTION  Apple Pie Barley Soup Breadstick Broccoli Salad Brownie Caprese	TOTALQUANTITY  3 4 1 1 10 2

Dpz Cheese Pizza Dpz Cheese Sauce Lak Cheese Stick Hsd Chef Salad Hsd Chicken Soup	4 2 5 14 13	
SUP DESCRIPTION		
Blu Chips Jd6 Coffee Dpz Dinner Roll Foi French Fries Crm Grilled Cheese Lss Grilled Cheese Crm Ham Melt Jmd Iced Tea Jmd Mushroom Pizza Crm Philly Melt Jmd Potato Soup	2 6 8 11 7 4 10 10 10 3 12	
Hsd Protein Box Jd6 Soda Lak Spinach Salad Gls Sugar Cookie Blu Turkey Club Ard Veggie Pizza Lss Veggie Soup Crm Wheat Bagel Hsd Yellow Cake  31 rows selected.	2 25 2 9 1 4 2 1 6	
also returned any match table. INNER JOIN retu both the FOOD and LUNC */	returned all the records from the FOOD table and aing records from the LUNCH_ITEM and all the records that have matching values in H_ITEM table.	*

--Question 3

\*\*\*\*\*

Use the DEPARTMENT and WORKER tables for the following questions.

A) List the worker id, city, department code, and department name for all workers in the database.

Set	the	lines	space	to	200	for	readability.
Use	an	INNER	JOIN				

 $\hfill\Box$  Order by the department code

 $\square$  26 rows selected.

B) List the worker id, city, department code, and department name for all workers in the database.

```
Include all workers, even if they have not been assigned to a
department yet.
 ☐ Use a RIGHT JOIN
 □ Order by the worker id
 \square 34 rows selected.
C) List the worker id, city, department code, and department name for all
workers in the database.
 Also include all departments, even if they have no employees.
 ☐ Use a RIGHT JOIN
 ☐ Order by the department code
 \square 31 rows selected
D) Create a nested query to display all departments without assigned
workers. Include
   the department code and the department name in the result set.
 ☐ In the nested query, add a WHERE clause to find the department
 codes that are not NULL
 \ \square Remember that you need to use NOT IN in the WHERE clause when
 comparing to the nested query
 \square 5 rows selected.
*/
--Question 3-A
set linespace 200
SELECT worker_id, city, w.dept_code, department_name
FROM department d INNER JOIN worker w
ON d.dept code = w.dept code
ORDER BY dept code;
--Question 3-B
SELECT worker_id, city, w.dept_code, department_name
FROM department d RIGHT JOIN worker w
ON d.dept code = w.dept code
ORDER BY worker id;
--Question 3-C
SELECT w.worker id, city, w.dept_code, department_name
FROM worker w RIGHT JOIN department d
ON w.dept code = d.dept code
ORDER BY dept code;
--Question 3-D
SELECT dept code, department name
FROM department
WHERE dept code NOT IN (SELECT dept code FROM worker WHERE dept code IS
NOT NULL);
/*
Results:
[Question 3-A]
WOR CITY
                           DEP DEPARTMENT NAME
580
                                 Acc Accounting
582 Hinsdale
                                 Acc Accounting
563 Oak Brook
                                 Acc Accounting
```

570	Aurora	Aud	Auditing
573			Auditing
	Chicago		<del>-</del>
	Chicago		Auditing
	Glencoe		Compliance
	Aurora	Exe	Executive
575	Glencoe	Fin	Finance
569	Evanston	Fin	Finance
	Oak Brook		Human Resources
550	oun brook	1111111	Haman Reboarces
MOD	OT TO	DED	
WOR	CITY	DEP	DEPARTMENT_NAME
566	Oak Brook	Hmn	Human Resources
571	Chicago	Hmn	Human Resources
	Oak Brook		Legal
	Wilmette	_	<del>-</del>
			Legal
58 /	Oak Brook	Leg	Legal
577	Wilmette	Sal	Sales
564	Chicago	Sal	Sales
	Hinsdale	Srv	Service
	Evanston		Service
			**
	Oak Brook	-	Service
556	Hinsdale	Tch	Technology
WOR	CITY	DEP	DEPARTMENT NAME
			_
565		Tch	Technology
$\Gamma \cap I$	Q1. '		m 1 1
	Chicago		Technology
	Chicago Hinsdale		Technology Technology
576	<del>-</del>	Tch	<del></del>
576	Hinsdale	Tch	Technology
576 578	Hinsdale Evanston	Tch	Technology
576 578	Hinsdale	Tch	Technology
576 578 26 1	Hinsdale Evanston  cows selected.	Tch	Technology
576 578 26 1	Hinsdale Evanston  cows selected.  estion 3-B]	Tch Tch	Technology Technology
576 578 26 1	Hinsdale Evanston  cows selected.	Tch Tch	Technology
576 578 26 1 [Que WOR	Hinsdale Evanston  cows selected.  estion 3-B] CITY	Tch Tch DEP	Technology Technology  DEPARTMENT_NAME
576 578 26 1 [Que WOR	Hinsdale Evanston  cows selected.  estion 3-B]	Tch Tch DEP	Technology Technology
576 578 26 1 [Que WOR  555	Hinsdale Evanston  cows selected.  estion 3-B] CITY	Tch Tch DEP  Exe	Technology Technology  DEPARTMENT_NAME
576 578 26 1 [Que WOR  555 556	Hinsdale Evanston  Cows selected.  estion 3-B] CITY Aurora Hinsdale	Tch Tch DEP  Exe Tch	Technology  DEPARTMENT_NAME Executive Technology
576 578 26 1 [Que WOR  555 556 557	Hinsdale Evanston  fows selected.  estion 3-B] CITY  Aurora Hinsdale Wilmette	Tch Tch  DEP Exe Tch Leg	Technology Technology  DEPARTMENT_NAMEExecutive Technology Legal
576 578 26 1 [Que WOR  555 556 557 558	Hinsdale Evanston  fows selected.  estion 3-B] CITY  Aurora Hinsdale Wilmette Oak Brook	Tch Tch  DEP Exe Tch Leg Hmn	Technology  DEPARTMENT_NAME  Executive Technology Legal Human Resources
576 578 26 1 [Que WOR  555 556 557 558 559	Hinsdale Evanston  cows selected.  estion 3-B] CITY Aurora Hinsdale Wilmette Oak Brook Hinsdale	Tch Tch DEP  Exe Tch Leg Hmn Srv	Technology  DEPARTMENT_NAME Executive Technology Legal Human Resources Service
576 578 26 1 [Que WOR  555 556 557 558 559 560	Hinsdale Evanston  cows selected.  estion 3-B] CITY  Aurora Hinsdale Wilmette Oak Brook Hinsdale Chicago	Tch Tch DEP  Exe Tch Leg Hmn Srv	Technology  DEPARTMENT_NAME  Executive Technology Legal Human Resources
576 578 26 1 [Que WOR  555 556 557 558 559 560	Hinsdale Evanston  cows selected.  estion 3-B] CITY Aurora Hinsdale Wilmette Oak Brook Hinsdale	Tch Tch DEP  Exe Tch Leg Hmn Srv	Technology  DEPARTMENT_NAME Executive Technology Legal Human Resources Service
576 578 26 1 [Que WOR  555 556 557 558 559 560 561	Hinsdale Evanston  cows selected.  estion 3-B] CITY  Aurora Hinsdale Wilmette Oak Brook Hinsdale Chicago	Tch Tch  DEP Exe Tch Leg Hmn Srv Aud	Technology  DEPARTMENT_NAME Executive Technology Legal Human Resources Service Auditing
576 578 26 1 [Que WOR  555 556 557 558 559 560 561 562	Hinsdale Evanston  Cows selected.  estion 3-B] CITY Aurora Hinsdale Wilmette Oak Brook Hinsdale Chicago Wilmette Glencoe	Tch Tch  DEP Exe Tch Leg Hmn Srv Aud Com	Technology  DEPARTMENT_NAME
576 578 26 1 [Que WOR  555 556 557 558 559 560 561 562 563	Hinsdale Evanston  cows selected.  estion 3-B] CITY  Aurora Hinsdale Wilmette Oak Brook Hinsdale Chicago Wilmette Glencoe Oak Brook	Tch Tch  DEP Exe Tch Leg Hmn Srv Aud Com Acc	Technology  DEPARTMENT_NAME
576 578 26 1 [Que WOR  555 556 557 558 559 560 561 562 563 564	Hinsdale Evanston  Cows selected.  estion 3-B] CITY Aurora Hinsdale Wilmette Oak Brook Hinsdale Chicago Wilmette Glencoe	DEP Exe Tch Leg Hmn Srv Aud Com Acc Sal	Technology  DEPARTMENT_NAME
576 578 26 1 [Que WOR  555 556 557 558 559 560 561 562 563	Hinsdale Evanston  cows selected.  estion 3-B] CITY  Aurora Hinsdale Wilmette Oak Brook Hinsdale Chicago Wilmette Glencoe Oak Brook	DEP Exe Tch Leg Hmn Srv Aud Com Acc Sal	Technology  DEPARTMENT_NAME
576 578 26 1 [Que WOR  555 556 557 558 559 560 561 562 563 564 565	Hinsdale Evanston  cows selected.  estion 3-B] CITY Aurora Hinsdale Wilmette Oak Brook Hinsdale Chicago Wilmette Glencoe Oak Brook Chicago	Tch Tch  DEP Exe Tch Leg Hmn Srv Aud Com Acc Sal Tch	Technology  DEPARTMENT_NAME
576 578 26 1 [Que WOR  555 556 557 558 559 560 561 562 563 564 565	Hinsdale Evanston  cows selected.  estion 3-B] CITY  Aurora Hinsdale Wilmette Oak Brook Hinsdale Chicago Wilmette Glencoe Oak Brook	Tch Tch  DEP Exe Tch Leg Hmn Srv Aud Com Acc Sal Tch	Technology  DEPARTMENT_NAME
576 578 26 1 [Que WOR  555 556 557 558 559 560 561 562 563 564 565	Hinsdale Evanston  cows selected.  estion 3-B] CITY Aurora Hinsdale Wilmette Oak Brook Hinsdale Chicago Wilmette Glencoe Oak Brook Chicago	Tch Tch  DEP Exe Tch Leg Hmn Srv Aud Com Acc Sal Tch	Technology  DEPARTMENT_NAME
576 578 26 1 [Que WOR  555 556 557 558 559 560 561 562 563 564 565 WOR	Hinsdale Evanston  cows selected.  estion 3-B] CITY Aurora Hinsdale Wilmette Oak Brook Hinsdale Chicago Wilmette Glencoe Oak Brook Chicago	DEP Exe Tch Leg Hmn Srv Aud Com Acc Sal Tch DEP	Technology  DEPARTMENT_NAME
576 578 26 1 [Que WOR  555 556 557 558 559 560 561 562 563 564 565 WOR  566	Hinsdale Evanston  Cows selected.  estion 3-B] CITY  Aurora Hinsdale Wilmette Oak Brook Hinsdale Chicago Wilmette Glencoe Oak Brook Chicago  CITY  Oak Brook	DEP Exe Tch Leg Hmn Srv Aud Com Acc Sal Tch DEP Hmn	Technology  DEPARTMENT_NAME
576 578 26 1 [Que WOR  555 556 557 558 559 560 561 562 563 564 565 WOR  566 567	Hinsdale Evanston  Cows selected.  Estion 3-B] CITY  Aurora Hinsdale Wilmette Oak Brook Hinsdale Chicago Wilmette Glencoe Oak Brook Chicago  CITY  Oak Brook Oak Brook	DEP Exe Tch Leg Hmn Srv Aud Com Acc Sal Tch DEP Hmn	Technology  DEPARTMENT_NAME
576 578 26 1 [Que WOR  555 556 557 558 559 560 561 562 563 564 565 WOR  566 567	Hinsdale Evanston  cows selected.  estion 3-B] CITY  Aurora Hinsdale Wilmette Oak Brook Hinsdale Chicago Wilmette Glencoe Oak Brook Chicago  CITY  Oak Brook Wilmette  Oak Brook Chicago	DEP Exe Tch Leg Hmn Srv Aud Com Acc Sal Tch DEP Hmn Leg	Technology  DEPARTMENT_NAME
576 578 26 1 [Que WOR  555 556 557 558 559 560 561 562 563 564 565 WOR  566 567 568 569	Hinsdale Evanston  cows selected.  estion 3-B] CITY  Aurora Hinsdale Wilmette Oak Brook Hinsdale Chicago Wilmette Glencoe Oak Brook Chicago  CITY  Oak Brook Wilmette Evanston	DEP Exe Tch Leg Hmn Srv Aud Com Acc Sal Tch DEP Hmn Leg Fin	Technology  DEPARTMENT_NAME
576 578 26 1 [Que WOR  555 556 557 558 559 560 561 562 563 564 565 WOR  566 567 568 569	Hinsdale Evanston  cows selected.  estion 3-B] CITY  Aurora Hinsdale Wilmette Oak Brook Hinsdale Chicago Wilmette Glencoe Oak Brook Chicago  CITY  Oak Brook Wilmette  Oak Brook Chicago	DEP Exe Tch Leg Hmn Srv Aud Com Acc Sal Tch DEP Hmn Leg Fin	Technology  DEPARTMENT_NAME

571 Chicago 572 Hinsdale	Hmn	Human Resources
573 574	Aud	Auditing
575 Glencoe 576 Hinsdale		Finance Technology
WOR CITY	DEP	DEPARTMENT_NAME
577 Wilmette		Sales
578 Evanston 579	Tch	Technology
580	Acc	Accounting
581 Oak Brook		Service
582 Hinsdale 583 Aurora	Acc	Accounting
584 Chicago	Tch	Technology
585 Evanston		Service
586 Glencoe	_	_
587 Oak Brook	Leg	Legal
WOR CITY		DEPARTMENT_NAME
588 Chicago		
34 rows selected.		
of few beforea.		
[Ougstion 2 C]		
[Question 3-C] WOR CITY	DEP	DEPARTMENT NAME
		DEPARTMENT_NAME
WOR CITY	 Acc	Accounting
WOR CITY 580 582 Hinsdale	Acc	Accounting Accounting
WOR CITY	Acc Acc Acc	Accounting Accounting Accounting
WOR CITY 580 582 Hinsdale	Acc Acc Acc Acc	Accounting Accounting Accounting Auditing
WOR CITY 580 582 Hinsdale 563 Oak Brook 570 Aurora	Acc Acc Acc Aud Aud	Accounting Accounting Accounting
WOR CITY	Acc Acc Acc Aud Aud Aud Com	Accounting Accounting Accounting Auditing Auditing Auditing Compliance
WOR CITY	Acc Acc Acc Aud Aud Com Exe	Accounting Accounting Accounting Auditing Auditing Auditing Compliance Executive
WOR CITY	Acc Acc Acc Aud Aud Com Exe Fin	Accounting Accounting Accounting Auditing Auditing Auditing Compliance Executive Finance
WOR CITY	Acc Acc Acc Aud Aud Com Exe Fin	Accounting Accounting Accounting Auditing Auditing Auditing Compliance Executive
WOR CITY	Acc Acc Acc Aud Aud Com Exe Fin Hmn	Accounting Accounting Accounting Auditing Auditing Auditing Compliance Executive Finance Finance Human Resources
WOR CITY	Acc Acc Acc Aud Aud Com Exe Fin Hmn	Accounting Accounting Accounting Auditing Auditing Auditing Compliance Executive Finance Finance
WOR CITY	Acc Acc Aud Aud Com Exe Fin Hmn	Accounting Accounting Accounting Auditing Auditing Auditing Compliance Executive Finance Finance Human Resources  DEPARTMENT_NAME
WOR CITY	Acc Acc Acc Aud Aud Com Exe Fin Fin Hmn	Accounting Accounting Accounting Auditing Auditing Auditing Compliance Executive Finance Finance Human Resources  DEPARTMENT_NAME
WOR CITY	Acc Acc Aud Aud Com Exe Fin Hmn Hmn Leg	Accounting Accounting Accounting Auditing Auditing Auditing Compliance Executive Finance Finance Human Resources  DEPARTMENT_NAME
WOR CITY	ACC ACC AUD AUD AUD AUD EXE FIN FIN HMN DEP HMN HMN Leg Leg	Accounting Accounting Accounting Auditing Auditing Auditing Compliance Executive Finance Finance Human Resources  DEPARTMENT_NAME
WOR CITY	Acc Acc Aud Aud Com Exe Fin Fin Hmn DEP  Hmn Leg Leg	Accounting Accounting Accounting Auditing Auditing Auditing Compliance Executive Finance Finance Human Resources  DEPARTMENT_NAME
WOR CITY	Acc Acc Aud Aud Aud Com Exe Fin Hmn DEP Hmn Hmn Leg Leg Sal Sal	Accounting Accounting Accounting Auditing Auditing Auditing Compliance Executive Finance Finance Human Resources  DEPARTMENT_NAME
WOR CITY	Acc Acc Aud Aud Aud Com Exe Fin Hmn Hmn Leg Leg Sal Srv	Accounting Accounting Accounting Auditing Auditing Auditing Compliance Executive Finance Finance Human Resources  DEPARTMENT_NAME Human Resources Human Resources Legal Legal Legal Sales

```
559 Hinsdale
                                 Srv Service
584 Chicago
                                 Tch Technology
WOR CITY
                                DEP DEPARTMENT NAME
576 Hinsdale
                                 Tch Technology
578 Evanston
                                 Tch Technology
565
                                 Tch Technology
556 Hinsdale
                                 Tch Technology
                                     Engineering
                                    Facilities
                                    Marketing
                                    Purchasing
                                     Shipping
31 rows selected.
[Question 3-D]
DEP DEPARTMENT NAME
--- ------
Eng Engineering
Fac Facilities
Mkt Marketing
Pur Purchasing
Shp Shipping
*/
*****************
*****
--Ouestion 4
/*
Use a UNION operation to list the names of the supplier cities and the
food suppliers,
  as well as the concatenated first and last names of the workers and
cities into one SQL statement
\hfill\Box 
 It is the UNION of two queries, one is to list supplier name and
supplier city from FOOD SUPPLIER table,
  and the other is to list the worker name(concatenated) and city from
WORKER table.
\ \square The result set should only have two columns (a column for all of the
names and a column for all of the cities).
\square Review concatenation (||) if needed. There is a space between worker
first name and last name.
\square Limit the results to only food suppliers and workers NOT from the
cities of Skokie, Oak Brook, and Chicago.
\hfill \square 
 Sort by the name (sort by supplier name if you used the food supplier
table in the first query,
  otherwise, sort by the worker name)
☐ 26 rows selected (8 from FOOD SUPPLIER, 18 from WORKER)
*/
SELECT supplier name, supplier city
```

```
FROM food supplier
WHERE supplier city NOT IN ('Skokie', 'Oak Brook', 'Chicago')
UNION
SELECT first name ||' '|| last name, city
FROM worker
WHERE city NOT IN ('Skokie', 'Oak Brook', 'Chicago')
ORDER BY supplier name;
/*
Results:
SUPPLIER NAME
                        SUPPLIER CITY
Angie Templeton
                         Hinsdale
Arnoldo Deli
                         Glencoe
Avery Trance
                        Aurora
Blair Reynolds
                        Evanston
                        Wilmette
Carey Martin
                        Hinsdale
Carole Sumner
Chase Johnson
                        Hinsdale
Crystal Market
                        Hinsdale
                        Aurora
Dane Shreve
                         Orland Park
Framer and Samson
Fresh Daily Vegetables
                         Aurora
SUPPLIER NAME
                    SUPPLIER CITY
______
Great Lakes Station
                         Wilmette
Harold Bakery
                        Hinsdale
Jodie Williams
                         Glencoe
Jose Sanchez
                         Glencoe
Katelynn Rayner
                        Evanston
                       Hinsdale
Keyanna Jones
                        Aurora
Lucias Sub Shop
Maria Bensen
                         Wilmette
Rita Gradle
                        Wilmette
Rosemont Bakery
                         Glencoe
Sam Frank
                         Evanston
SUPPLIER NAME
                        SUPPLIER CITY
______
Shawn Smith
                         Glencoe
Taylor Young
                         Wilmette
Tom Neal
                        Hinsdale
Tonya Montre
                        Aurora
26 rows selected.
* /
******************
*****
--Question 5
Use the INTERSECT operation to find any food suppliers that are living in
the same
```

```
city as any of the workers. 6 rows selected.
*/
SELECT supplier city
FROM food supplier
INTERSECT
SELECT city
FROM worker;
/*
Results:
SUPPLIER CITY
______
Aurora
Chicago
Glencoe
Hinsdale
Oak Brook
Wilmette
6 rows selected.
* /
*****************
*****
--Question 6
/*
Use the MINUS operation to list the cities of the workers where no food
suppliers live
(i.e. city where there are workers living, but not suppliers).
A) Start by running a query that lists the Distinct worker cities.
   □ 8 rows selected. (Hint: using distinct will only list each city
B) Then run a query that lists the Distinct food supplier cities.
 \square 7 rows selected.
C) Using the MINUS operation, combine the two queries from 6A and 6B,
starting
with the suppliers' cities first.
 ☐ 1 row selected
* /
--Question 6-A
SELECT DISTINCT city
FROM worker;
--Ouestion 6-B
SELECT DISTINCT supplier city
FROM food supplier;
--Question 6-C
SELECT DISTINCT supplier city
FROM food supplier
MINUS
SELECT DISTINCT city
FROM worker;
```

```
/*
Results:
[Question 6-A]
CITY
_____
Aurora
Oak Brook
Chicago
Wilmette
Evanston
Hinsdale
Glencoe
8 rows selected.
[Question 6-B]
SUPPLIER CITY
_____
Oak Brook
Aurora
Orland Park
Chicago
Wilmette
Glencoe
Hinsdale
7 rows selected.
[Question 6-C]
SUPPLIER_CITY
Orland Park
*/
********************
*****
```