

## Assignment 2

Note:

- Use the same database for Assignment 1 to complete Assignment 2.
- For each question, **type your SQL statements** and provide the **screenshots of the Result Grids**.
- Name the file as LAST\_FIRST\_HW2. Submit a PDF file via eLC.

**This assignment is based on the tables created using the Sports.sql file.**

### JOINS

1. Write a query to display the names of all products in the order with ord\_id 100.

```
SELECT name FROM s_product JOIN s_item ON s_product.s_product_id =  
s_item.product_id WHERE ord_id = 100;
```

Result Grid		Filter Rows:	Search
<hr/>			
name			
▶	Bunny Boot		
◀	Pro Ski Boot		
▶	Bunny Ski Pole		
◀	Pro Ski Pole		
▶	Himalaya Bicycle		
◀	New Air Pump		
▶	Prostar 10 Pound Weight		
◀			

2. Write a query to display each employee's last name and first name in one column as "Lastname, Firstname", department id, and the name of the department. Sort the result by department name and then employees' last name and first name in ascending order.

```
SELECT CONCAT(last_name, first_name) as employeename, s_emp.dept_id,  
s_dept.name FROM s_emp INNER JOIN s_dept ON s_emp.dept_id=s_dept.s_dept_id  
ORDER BY name, employeename ASC;
```

**Result Grid** Filter Rows: Search

	employeeName	dept_id	name	
▶	RopeburnAudry	50	Administration	
◀	VelasquezCarmen	50	Administration	
◀	Quick-To-SeeMark	10	Finance	
◀	BiriBen	43	Operations	
◀	CatchpoleAntoinette	44	Operations	
◀	ChangEddie	44	Operations	
◀	DancsBela	45	Operations	
◀	HavelMarta	45	Operations	
◀	MaduroElena	41	Operations	
◀	MarkarianAlexander	43	Operations	
◀	MenchuRoberta	42	Operations	
◀	NewmanChad	43	Operations	
◀	NgaoLaDoris	41	Operations	
◀	NozakiAkira	42	Operations	
◀	PatelVikram	42	Operations	
◀	SchwartzSylvie	45	Operations	
◀	SmithGeorge	41	Operations	
◀	UrguhartMolly	41	Operations	
◀	DumasAndre	35	Sales	
◀	GiljumHenry	32	Sales	
◀	MageeColin	31	Sales	
◀	NagayamaMidori	31	Sales	
◀	NguyenMai	34	Sales	
◀	PatelRadha	34	Sales	
◀	SedeghiYasmin	33	Sales	

3. Write a query to display the order\_id, the total values of items, and the number of distinct items in the order for all orders.

```
SELECT DISTINCT ord_id, total FROM s_item, s_ord
WHERE s_ord.s_ord_id=s_item.ord_id;
```

	ord_id	total
▶	97	84000.00
◀	98	595.00
◀	99	7707.00
◀	100	601100.00
◀	101	8056.60
◀	102	8335.00
◀	103	377.00
◀	104	32430.00
◀	105	2722.24
◀	106	15634.00
◀	107	142171.00
◀	108	149570.00
◀	109	1020935....
◀	110	1539.13
◀	111	2770.00
◀	112	550.00

4. Display the department name and the number of employees it has. Sort the result by the number of employees in descending order. Explore why there are duplicate departments in the results and provide your answer below your query (s\_emp and s\_dept tables).

```
SELECT s_dept.name, COUNT(DISTINCT(s_emp_id)) as employee_count
FROM s_emp, s_dept
WHERE s_dept.s_dept_id = s_emp.dept_id
GROUP BY s_dept_id
ORDER BY employee_count DESC;
```

	name	employee_cou...
▶	Operations	4
◀	Operations	3
◀	Operations	3
◀	Operations	3
◀	Sales	2
◀	Sales	2
◀	Operations	2
◀	Administration	2
◀	Finance	1
◀	Sales	1
◀	Sales	1
◀	Sales	1

5. Display the department name, the number of employees it has, and the percentage of its employees to all employees. Round the percentage number to one decimal place with a % sign at the end. Sort the result by the number of employees in descending order (s\_emp and s\_dept tables).

```
Select dept.name, count(emp.s_emp_id) ,
CONCAT(FORMAT((count(emp.s_emp_id)/(SELECT COUNT(s_emp_id) FROM
s_emp))*100,1),"%")
FROM s_dept AS dept,s_emp AS emp
where emp.dept_id=dept.s_dept_id
GROUP BY dept.s_dept_id
ORDER BY count(emp.s_emp_id) DESC;
```

Result Grid    Filter Rows:    Search    Export:

	name	count(emp.s_emp_...)	CONCAT(FORMAT((count(emp.s_emp_id)/(S...))
▶	Operations	4	16.0%
	Operations	3	12.0%
	Operations	3	12.0%
	Operations	3	12.0%
	Sales	2	8.0%
	Sales	2	8.0%
	Operations	2	8.0%
	Administration	2	8.0%
	Finance	1	4.0%
	Sales	1	4.0%
	Sales	1	4.0%
	Sales	1	4.0%

6. Display the order id, customer id, and customer name of all orders (s\_customer and s\_ord tables).

```
SELECT s_customer.name, s_ord.s_ord_id, s_ord.customer_id FROM s_ord
INNER JOIN s_customer ON s_ord.customer_id=s_customer.s_customer_id;
```

Result Grid    Filter Rows:    Search

	name	s_ord_id	customer_id
▶	Unisports	97	201
	OJ Athletics	98	202
	Delhi Sports	99	203
	Womansport	100	204
	Womansport	111	204
	Kam's Sporting Goods	101	205
	Sportique	102	206
	Muench Sports	103	208
	Muench Sports	104	208
	Beisbol Si!	105	209
	Futbol Sonora	106	210
	Futbol Sonora	112	210
	Kuhn's Sports	107	211
	Hamada Sport	108	212
	Big John's Sports E...	109	213
	Ojibway Retail	110	214

7. Write a query to display the name of all customers, and order id, customer id, and customer name of the orders that they placed. Explain the difference between Q6 and Q7.

```
SELECT s_customer.name, s_ord.s_ord_id, s_ord.customer_id
FROM s_ord
RIGHT OUTER JOIN s_customer ON s_ord.customer_id=s_customer_id;
```

	name	s_ord_id	customer_id	
►	Unisports	97	201	
	OJ Atheletics	98	202	
	Delhi Sports	99	203	
	Womansport	100	204	
	Womansport	111	204	
	Kam's Sporting Goods	101	205	
	Sportique	102	206	
	Sweet Rock Sports	NULL	NULL	
	Muench Sports	103	208	
	Muench Sports	104	208	
	Beisbol Si!	105	209	
	Futbol Sonora	106	210	
	Futbol Sonora	112	210	
	Kuhn's Sports	107	211	
	Hamada Sport	108	212	
	Big John's Sports E...	109	213	
	Ojibway Retail	110	214	
	Sporta Russia	NULL	NULL	

8. Write a query to display the customer id, customer name, and the number of orders that the customers placed for the customers who placed more than 1 order. Sort the results by customer name in descending order.

```
SELECT cust.name ,cust.s_customer_id , count(ord.s_ord_id)
FROM s_ord ord join s_customer cust WHERE ord.customer_id=cust.s_customer_id
GROUP BY cust.s_customer_id
HAVING count(ord.s_ord_id) > '1' ORDER BY cust.name DESC;
```

Result Grid    Filter Rows:    Search    Export:

	name	s_customer_id	count(ord.s_ord_...)
▶	Womansport	204	2
	Muench Sports	208	2
	Futbol Sonora	210	2

9. Display **order\_id**, **product\_id**, **quantity**, the **warehouse location (city only)** of the product, and **amount in stock** for all products in the order with **ord\_id** 100.

```
SELECT s_item.ord_id, s_item.product_id, s_warehouse.city,
s_item.quantity,s_inventory.amount_in_stock
FROM s_item JOIN s_inventory
ON s_item.product_id=s_inventory.product_id JOIN s_warehouse ON
s_inventory.warehouse_id=s_warehouse.s_warehouse_id
WHERE s_item.ord_id = 100;
```

Result Grid    Filter Rows:    Search    Export:

	ord_id	product_...	city	quantity	amount_in_sto...
▶	100	10011	Seattle	500	650
	100	10013	Seattle	400	400
	100	10013	Bratislava	400	314
	100	10021	Seattle	500	500
	100	10023	Seattle	400	400
	100	10023	Bratislava	400	500
	100	30326	Seattle	600	2100
	100	30326	Sao Paolo	600	147
	100	30326	Hong Kong	600	113
	100	30326	Bratislava	600	277
	100	30433	Seattle	450	650
	100	30433	Sao Paolo	450	130
	100	30433	Lagos	450	35
	100	30433	Hong Kong	450	0
	100	30433	Bratislava	450	273
	100	41010	Seattle	250	250
	100	41010	Lagos	250	59
	100	41010	Hong Kong	250	80
	100	41010	Bratislava	250	151

**Hints:**

1. 7 rows.
2. 25 rows.
3. 16 rows.
4. 12 rows.
5. 12 rows.
6. 16 rows.
7. 18 rows.
8. 3 rows.
9. 19 rows.