

## 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
	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 employeeename, 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, employeeename ASC;
```

Result Grid   Filter Rows: <input type="text" value="Search"/>				
	employee_name	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;
```

Result Grid   Filter Rows: 			
	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;
```




Result Grid   Filter Rows: <input type="text"/>			
	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: <input type="text" value="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: <input type="text" value="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;
```

Result Grid   Filter Rows: <input type="text" value="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	
▶	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: <input type="text" value="Search"/>				
	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: <input type="text" value="Search"/>						
	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 Paulo	600	147	
	100	30326	Hong Kong	600	113	
	100	30326	Bratislava	600	277	
	100	30433	Seattle	450	650	
	100	30433	Sao Paulo	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.