

# CSCD 327 Lab 5

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## 1 Find All Customer Orders

```
1 SELECT order_id, name AS customer_name, email AS customer_email,
      order_date
2 FROM orders NATURAL JOIN customers
3 ORDER BY order_id;
```

*	order_id	customer_name	customer_email	order_date
1	1001	Alice Smith	alice@example.com	2026-01-10
2	1002	Bob Johnson	bob@example.com	2026-01-12
3	1003	Charlie Lee	charlie@example.com	2026-01-19
4	1004	Alice Smith	alice@example.com	2026-01-23
5	1005	Diana Wu	diana@example.com	2026-01-28

Figure 1: Finding customer orders

## 2 Find The Customers Who Have Placed An Order

```
1 SELECT DISTINCT name AS customer_name  
2 FROM customers NATURAL JOIN orders;
```

*	customer_name
1	Alice Smith
2	Bob Johnson
3	Charlie Lee
4	Diana Wu

Figure 2: Finding customer names

### 3 Find Orders Before Jan 20

```
1 SELECT order_id, order_date, product_id, quantity  
2 FROM orders NATURAL JOIN order_items  
3 WHERE order_date < '2026-01-20'
```

*	order_id	order_date	product_id	quantity
1	1001	2026-01-10	101	2
2	1001	2026-01-10	103	3
3	1002	2026-01-12	102	1
4	1003	2026-01-19	104	5

Figure 3: Finding orders before Jan 20

## 4 Find Electronic Orders

```
1 SELECT name AS product_name, quantity, order_id  
2 FROM orders NATURAL JOIN order_items JOIN products USING(product_id)  
3 WHERE category = 'Electronics'  
4 ORDER BY product_name
```

*	product_name	quantity	order_id
1	Bluetooth Speaker	1	1002
2	Wireless Mouse	2	1001
3	Wireless Mouse	1	1005

Figure 4: Finding electronic orders

## 5 Find Multi Item Customers

```
1 SELECT DISTINCT name AS customer_name  
2 FROM orders NATURAL JOIN order_items JOIN customers USING(customer_id)  
3 WHERE quantity > 1
```

*	customer_name
1	Alice Smith
2	Charlie Lee

Figure 5: Finding multi item customers

## 6 Find T-Shirt Orders

```
1 SELECT order_id, order_date  
2 FROM orders NATURAL JOIN products  
3 WHERE name = 'T-Shirt'
```

*	order_id	order_date
1	1001	2026-01-10
2	1002	2026-01-12
3	1003	2026-01-19
4	1004	2026-01-23
5	1005	2026-01-28

Figure 6: Finding T-Shirt orders

## 7 Find Recent Alice Orders

```
1 SELECT product_id, quantity
2 FROM orders NATURAL JOIN order_items JOIN customers USING(customer_id)
3 WHERE name = 'Alice Smith' AND order_date > '2026-01-15'
```

*	product_id	quantity
1	103	2
2	105	1

Figure 7: Finding recent Alice orders

## 8 Find All Alice Orders

```
1 SELECT order_id, products.name AS product_name, quantity
2 FROM orders NATURAL JOIN order_items JOIN customers USING(customer_id)
3 JOIN products USING(product_id)
4 WHERE customers.name = 'Alice Smith'
```

*	order_id	product_name	quantity
	1	1001 Wireless Mouse	2
	2	1001 T-Shirt	3
	3	1004 T-Shirt	2
	4	1004 Backpack	1

Figure 8: Finding all Alice orders

## 9 Find USA Orders

```
1 SELECT DISTINCT products.name  
2 FROM orders NATURAL JOIN order_items JOIN customers USING(customer_id)  
3 JOIN products USING(product_id)  
3 WHERE country = 'USA'
```

*	name
1	Wireless Mouse
2	T-Shirt
3	Backpack

Figure 9: Finding USA orders

## 10 Find Electronics Customers

```
1 SELECT customers.name AS customer_name, products.name AS product_name  
2 FROM orders NATURAL JOIN order_items JOIN customers USING(customer_id)  
3 JOIN products USING(product_id)  
WHERE category = 'Electronics'
```

*	customer_name	product_name
1	Alice Smith	Wireless Mouse
2	Diana Wu	Wireless Mouse
3	Bob Johnson	Bluetooth Speaker

Figure 10: Finding electronics customers