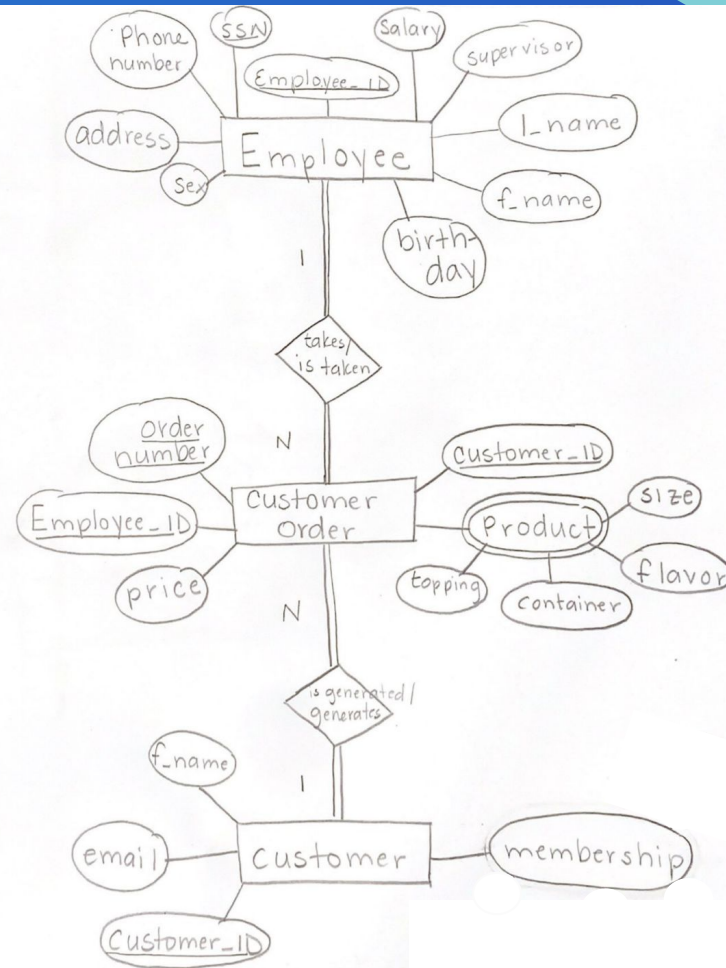




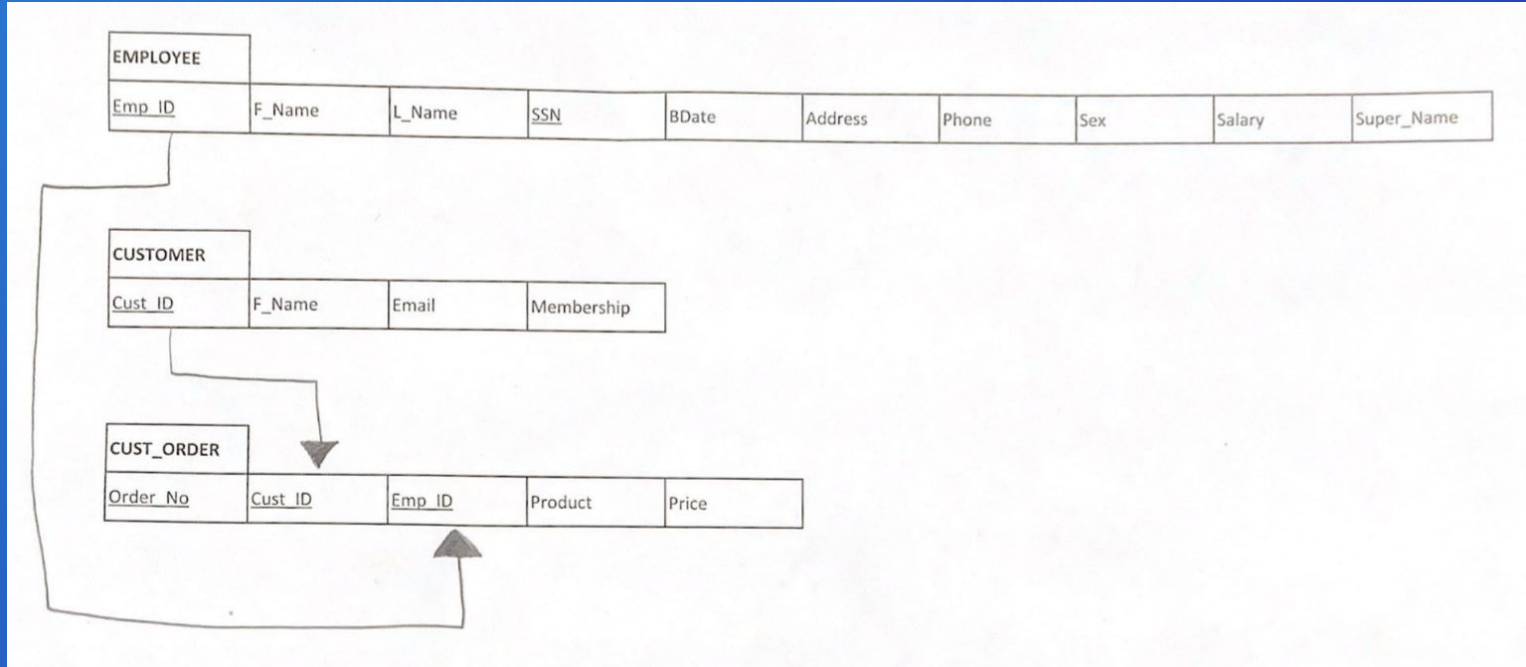
# Hoa's Waffle Cones: The Ice Cream Shop Database

Lauren Dietzler, Hoa Huynh and Marion Murzello

# ER Diagram



# Schema Representation of the ER Diagram



# Business Rules and Restrictions

*A customer can generate many orders.*

*(1:N)*

*Many orders can be generated by one customer.*

*(N:1)*

*An employee can take many orders.*

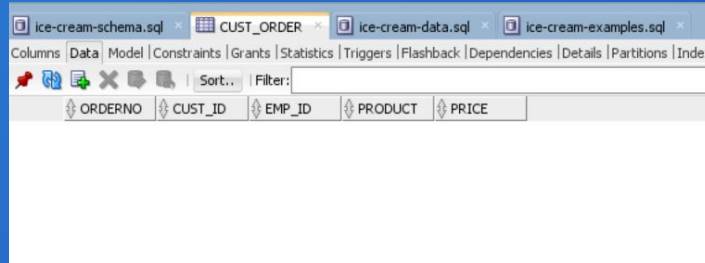
*(1:N)*

*Many orders can be taken by one employee.*

*(N:1)*



# Blank Schema

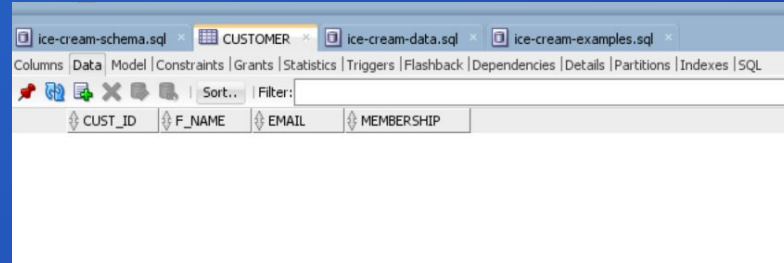


ice-cream-schema.sql | CUST\_ORDER | ice-cream-data.sql | ice-cream-examples.sql

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Partitions | Indexes | SQL

Sort... | Filter:

ORDERNO	CUST_ID	EMP_ID	PRODUCT	PRICE
---------	---------	--------	---------	-------

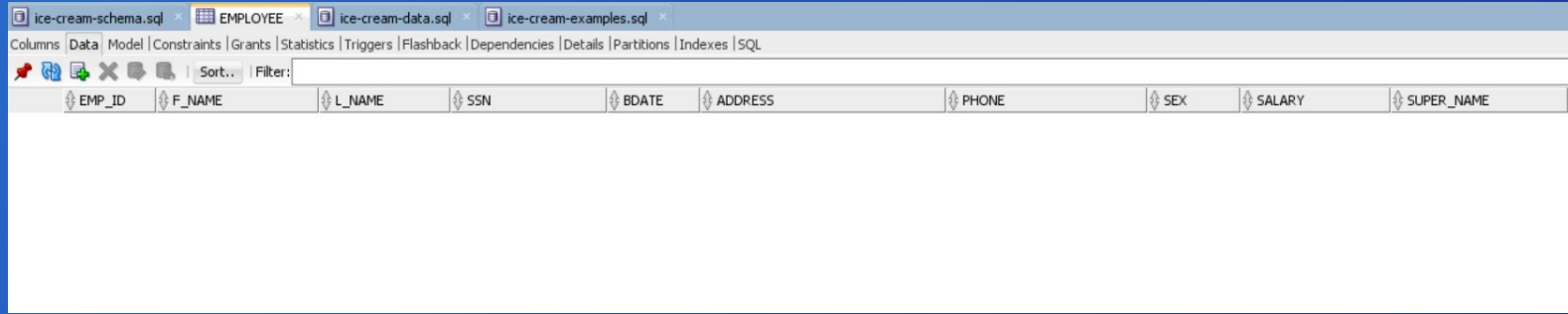


ice-cream-schema.sql | CUSTOMER | ice-cream-data.sql | ice-cream-examples.sql

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Partitions | Indexes | SQL

Sort... | Filter:

CUST_ID	F_NAME	EMAIL	MEMBERSHIP
---------	--------	-------	------------



ice-cream-schema.sql | EMPLOYEE | ice-cream-data.sql | ice-cream-examples.sql

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Partitions | Indexes | SQL

Sort... | Filter:

EMP_ID	F_NAME	L_NAME	SSN	BDATE	ADDRESS	PHONE	SEX	SALARY	SUPER_NAME
--------	--------	--------	-----	-------	---------	-------	-----	--------	------------

# Data Insertion

ice-cream-schema.sql x EMPLOYEE x ice-cream-data.sql x ice-cream-examples.sql x										
Columns Data Model Constraints Grants Statistics Triggers Flashback Dependencies Details Partitions Indexes SQL										
Sort.. Filter:										
	EMP_ID	F_NAME	L_NAME	SSN	BDATE	ADDRESS	PHONE	SEX	SALARY	SUPER_NAME
1	123	Hoa	Huynh	123456789	27-AUG-00	800 East Lancaster Avenue, Villanova, PA	6102345678	F	45000	(null)
2	234	Marion	Murzello	987654321	10-AUG-00	829 Lancaster Avenue, Bryn Mawr, PA	8562345678	F	40000	Hoa
3	345	Lauren	Dietzler	786941234	16-AUG-99	1107 East Lancaster Avenue, Bryn Mawr, PA	2156666666	F	35000	Marion
4	456	Taylor	Swift	666739305	13-DEC-89	863 West Lancaster Avenue, Bryn Mawr, PA	2674546767	F	25000	Lauren
5	561	Tom	Holland	128849432	01-JUN-96	1125 Lancaster Avenue, Bryn Mawr, PA	4848389622	M	25000	Hoa
6	612	Chris	Pine	883922890	26-AUG-80	130 South Bryn Mawr Avenue, Bryn Mawr, PA	9129876543	M	25000	Marion

ice-cream-schema.sql x CUSTOMER x ice-cream-data.sql x ice-cream-examples.s				
Columns Data Model Constraints Grants Statistics Triggers Flashback Dependencies Details Partitions				
Sort.. Filter:				
	CUST_ID	F_NAME	EMAIL	MEMBERSHIP
1	21212	Mitch	mitch@gmail.com	yes
2	98574	Kelly	kelly@yahoo.com	no
3	23232	Peter	peter@gmail.com	yes
4	34343	Edward	edward.char@villanova.edu	yes
5	90037	Amanda	amanda@aol.com	no
6	45454	Sheila	sheila@comcast.net	no

ice-cream-schema.sql x CUST_ORDER x ice-cream-data.sql x ice-cream-examples.sql x					
Columns Data Model Constraints Grants Statistics Triggers Flashback Dependencies Details Partitions Indexes SQL					
Sort.. Filter:					
	ORDERNO	CUST_ID	EMP_ID	PRODUCT	PRICE
1	12345	21212	456	medium, chocolate, waffle cone, rainbow sprinkles	5.5
2	32154	98574	612	kiddie, vanilla, cup, no topping	3.95
3	45678	23232	612	small, mint chocolate chip, sugar cone, whipped cream	4.25
4	65638	34343	345	medium, cookies and cream, cup, hot fudge	5.5
5	78294	90037	561	large, strawberry, cake cone, hot fudge	6.75
6	98482	45454	456	large, butter pecan, waffle cone, caramel	6.75

# Data Update

- UPDATE Queries
- Increase Lauren's salary to \$39,000

```
UPDATE employee SET salary = '39000' WHERE ssn = '786941234';
```

EMP_ID	F_NAME	L_NAME	SSN	BDATE	ADDRESS	PHONE	SEX	SALARY	SUPER_NAME
1	123 Hoa	Huynh	123456789	27-AUG-00	800 East Lancaster Avenue, Villanova, PA	6102345678 F		45000 (null)	
2	234 Marion	Murzello	987654321	10-AUG-00	829 Lancaster Avenue, Bryn Mawr, PA	8562345678 F		40000 Hoa	
3	345 Lauren	Dietzler	786941234	16-AUG-99	1107 East Lancaster Avenue, Bryn Mawr, PA	2156666666 F		39000 Marion	
4	456 Taylor	Swift	666739305	13-DEC-89	863 West Lancaster Avenue, Bryn Mawr, PA	2674546767 F		25000 Lauren	
5	561 Tom	Holland	128849432	01-JUN-96	1125 Lancaster Avenue, Bryn Mawr, PA	4848389622 M		25000 Hoa	
6	612 Chris	Pine	883922890	26-AUG-80	130 South Bryn Mawr Avenue, Bryn Mawr, PA	9129876543 M		25000 Marion	



# Data Select

- SELECT Queries
- Find customers who have spent at least 5 dollars in a single order and list their name and price of order
- Order by price descending

```
SELECT f_name, price  
FROM customer c, cust_order o  
WHERE o.price >= '5' AND o.cust_ID = c.cust_ID  
ORDER BY o.price DESC;
```



The screenshot shows a database application window with two tabs: 'Script Output' and 'Query Result'. The 'Query Result' tab is active, displaying a table with 4 rows of data. The table has two columns: 'F\_NAME' and 'PRICE'. The data is sorted by price in descending order. The first two rows have a price of 6.75 (Amanda and Sheila), and the next two rows have a price of 5.5 (Mitch and Edward). The status bar at the bottom indicates 'All Rows Fetched: 4 in 0.013 seconds'.

	F_NAME	PRICE
1	Amanda	6.75
2	Sheila	6.75
3	Mitch	5.5
4	Edward	5.5

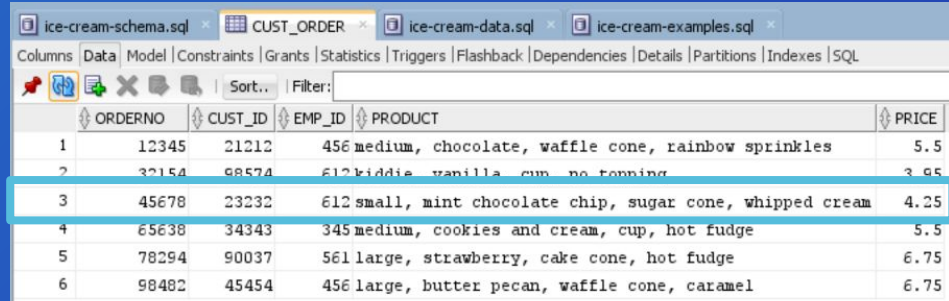


# Data Delete

- DELETE Queries
- Cancel Order Number #45678

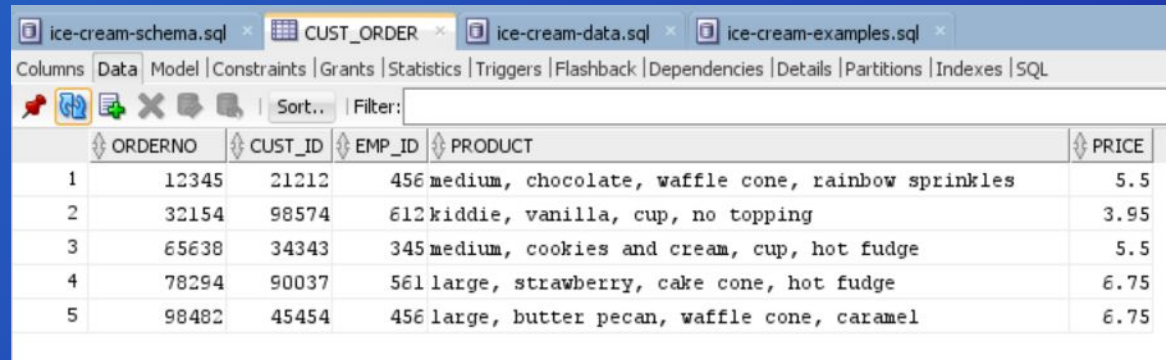
```
DELETE FROM cust_order  
WHERE orderno = '45678';
```

Before



ORDERNO	CUST_ID	EMP_ID	PRODUCT	PRICE
1	12345	21212	456 medium, chocolate, waffle cone, rainbow sprinkles	5.5
2	32154	98574	612 kiddie, vanilla, cup, no topping	3.95
3	45678	23232	612 small, mint chocolate chip, sugar cone, whipped cream	4.25
4	65638	34343	345 medium, cookies and cream, cup, hot fudge	5.5
5	78294	90037	561 large, strawberry, cake cone, hot fudge	6.75
6	98482	45454	456 large, butter pecan, waffle cone, caramel	6.75

After



ORDERNO	CUST_ID	EMP_ID	PRODUCT	PRICE
1	12345	21212	456 medium, chocolate, waffle cone, rainbow sprinkles	5.5
2	32154	98574	612 kiddie, vanilla, cup, no topping	3.95
3	65638	34343	345 medium, cookies and cream, cup, hot fudge	5.5
4	78294	90037	561 large, strawberry, cake cone, hot fudge	6.75
5	98482	45454	456 large, butter pecan, waffle cone, caramel	6.75

**Thank you for your time and attention!**

