



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

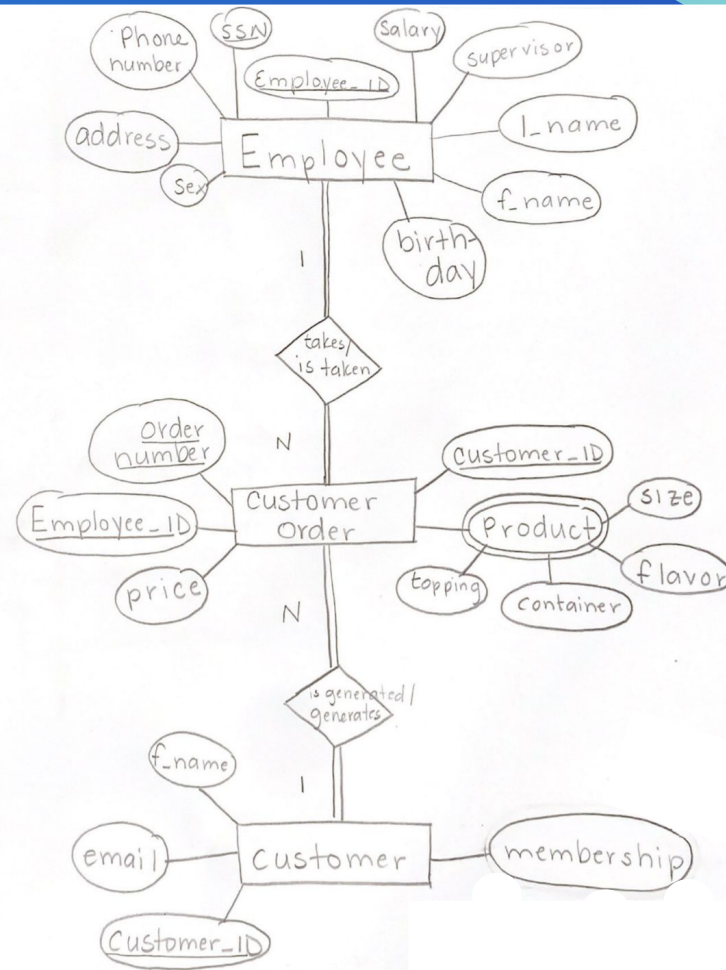
Lauren Dietzler, Hoa Huynh and Marion Murzello

# Project Proposal

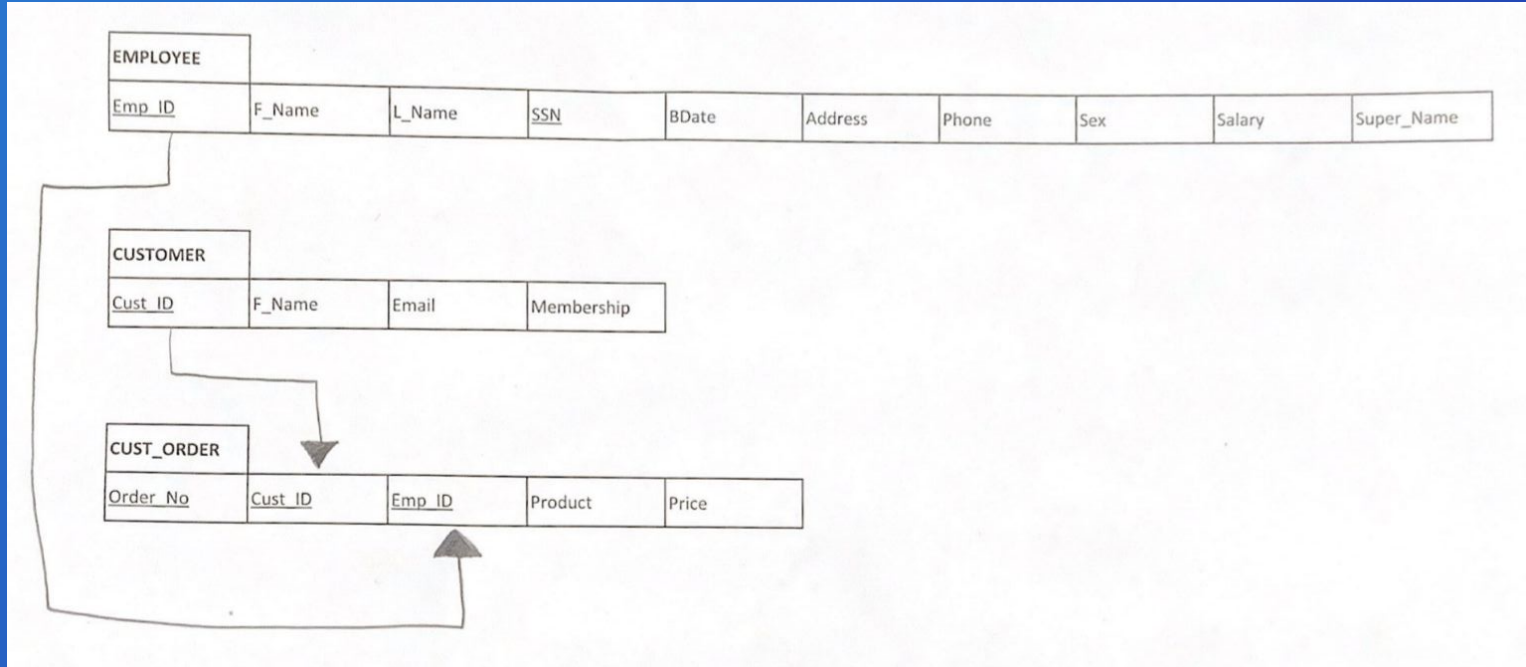
The goal of this project is to create a database that can be used by an ice cream shop to keep track of their orders, customers and employees. Keeping track of these things will help the business to run more smoothly and efficiently.



# 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.*

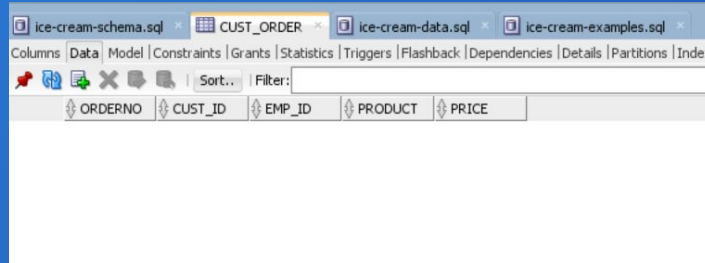
*(1:N)*

*Many orders can be taken by one employee.*

*(N:1)*



# Blank Schema

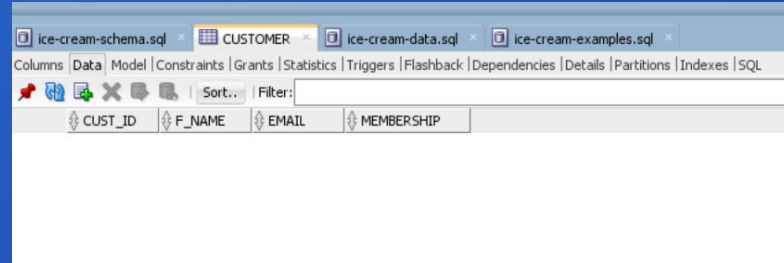


ice-cream-schema.sql | CUST\_ORDER | ice-cream-data.sql | ice-cream-examples.sql

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

Sort... | Filter:

ORDERNO	CUST_ID	EMP_ID	PRODUCT	PRICE
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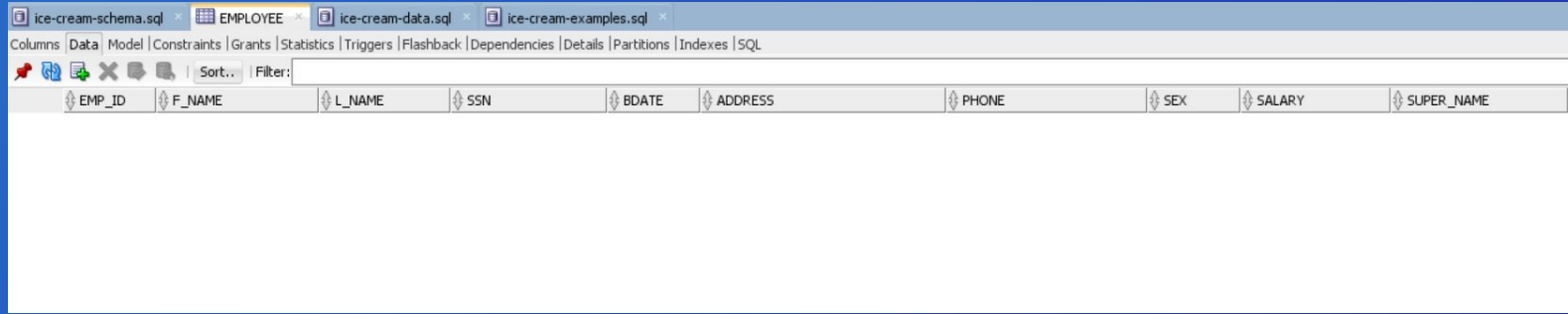


ice-cream-schema.sql | CUSTOMER | ice-cream-data.sql | ice-cream-examples.sql

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

Sort... | Filter:

CUST_ID	F_NAME	EMAIL	MEMBERSHIP
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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
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# 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 top of the window indicates 'All Rows Fetched: 4 in 0.013 seconds'.

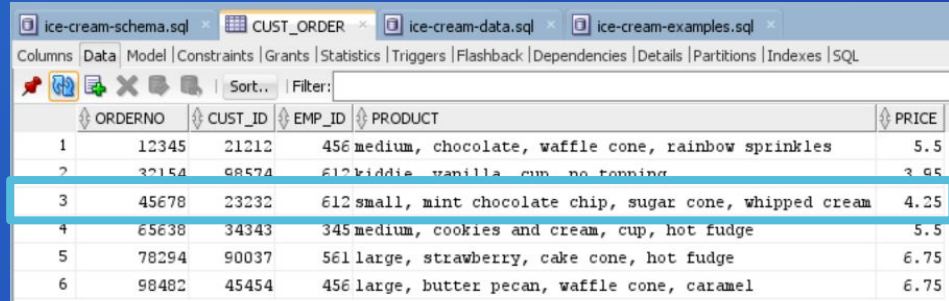
	F_NAME	PRICE
1	Amanda	6.75
2	Sheila	6.75
3	Mitch	5.5
4	Edward	5.5

# Data Delete

- DELETE Queries
- Cancel Order Number 45678

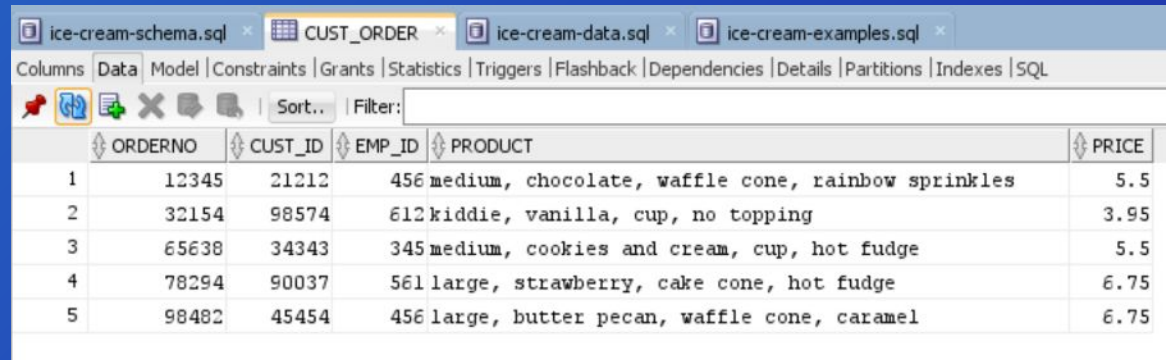
```
DELETE FROM cust_order  
WHERE orderno = '45678';
```

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

