**SQL**

**Search Products**

Browse All Sorted by Type

SELECT \*

FROM Product

ORDER BY product\_type ASC

Search by Name

SELECT \*

FROM Product

WHERE product\_name = ‘football’

Search by Product\_id

SELECT \*

FROM Product

WHERE product\_id = 7001

Search by Price

SELECT \*

FROM Product

WHERE price = 30

Search by Product\_Type

SELECT \*

FROM Product

WHERE type = ‘input’

**Add New Records**

Add New Customer

INSERT INTO Customer (customer\_name, customer\_address\_street, customer\_address\_city, customer\_address\_state, customer\_address\_zip, customer\_type)

VALUES (‘name’, ‘street’, ‘city’, ‘state’, ‘zip’, ‘cust\_type’)

INSERT INTO Accounts (customer\_id, balance)

VALUES (cust\_id, balance)

Add New Product

INSERT INTO Product (product\_name, quantity, price, cost, product\_type)

VALUES (‘prod\_name’, quantity, price, cost, ‘prod\_type’)

Add New Salesperson

INSERT INTO Employees (emp\_name, emp \_address\_street, emp \_address\_city, emp \_address\_state, emp \_address\_zip, email)

VALUES (‘name’, ‘street’, ‘city’, ‘state’, ‘zip’, ‘email’)

INSERT INTO Salesperson (title, salary, store\_id)

VALUES ‘title’, salary, store\_id)

**To enter in transaction history**

Create new record into transaction table

INSERT INTO Transaction (order\_id, order\_date, salesperson\_ID, product\_ID, customer\_ID, product\_quantity, sales\_amount)

**AGGREGATION QUERIES**

**Total company sales and profits**

SELECT SUM((Transaction.product\_quantity)\*(Transaction.price)) AS 'Total Revenue',

(SUM(Transaction.product\_quantity\*Transaction.price))-(SUM(Transaction.product\_quantity\*Product.cost)) AS ‘Total Profit’

FROM Transaction, Product

WHERE Transaction.product\_id=Product.product\_id

**COMPLETE**

**Top 5 Product Categories By Sales**

SELECT Product.product\_type AS 'Product Type', SUM((Transaction.product\_quantity)\*(Transaction.price)) AS Revenue

FROM Transaction, Product

WHERE Product.product\_id=Transaction.product\_id

GROUP BY Product.product\_type

ORDER BY Revenue DESC

LIMIT 5

**COMPLETE**

**Sales by Region**

SELECT Region.region\_name AS Region, SUM((Transaction.product\_quantity)\*(Transaction.price)) AS Revenue

FROM Transaction, Region, Salesperson, Store

WHERE Transaction.emp\_id=Salesperson.emp\_id AND Salesperson.store\_id=Store.store\_id AND Store.region\_id=Region.region\_id

GROUP BY Region.region\_name

**COMPLETE**

**Top 3 products by quantity purchased by each business**

SELECT product\_name, Customer.customer\_name, quantity

FROM Customer, Product, Transaction

WHERE Transaction.customer\_id=Customer.customer\_id AND Transaction.product\_id=Product.product\_id AND Customer.customer\_type=’business’

GROUP BY product\_name

**Top 10 Customers By Sales**

SELECT Customer.customer\_name AS 'Customer', Customer.customer\_type AS Type, SUM((Transaction.product\_quantity)\*(Transaction.price)) AS Revenue

FROM Customer, Transaction

WHERE Customer.customer\_id=Transaction.customer\_id

GROUP BY customer\_name

ORDER BY Revenue DESC

LIMIT 10

**COMPLETE**

**Optional Queries**

**To update inventory with additional quantity of a existing product**

UPDATE Product

SET quantity = quantity + ‘input’

WHERE product\_id = ‘input’

New Regions?

New Stores?