**Getting Data from One Table**

**Where**

Here we will learn about SELECT, FROM, WHERE, ORDER BY and LIMIT. You've seen a few of these already. Here I'll retrieve all data from from the table sales\_item.

SELECT \* FROM sales\_item;

WHERE is used to define which rows are included in the results based on a condition. Show all sales with a discount greater than 15%

**Conditional Operators**

= : Equal

< : Less than

> : Greater than

<= : Less than or Equal

>= : Greater than or Equal

<> : Not Equal

!= : Not Equal

SELECT \* FROM sales\_item WHERE discount > .15;

**Logical Operators**

AND, OR and NOT are logical operators. Use them to combine conditions. Find the order dates for all orders in December, 2018.

SELECT time\_order\_taken

FROM sales\_order

WHERE time\_order\_taken > '2018-12-01' AND time\_order\_taken < '2018-12-31';

You can use BETWEEN to get the same results

SELECT time\_order\_taken

FROM sales\_order

WHERE time\_order\_taken BETWEEN '2018-12-01' AND '2018-12-31';

**Order By**

ORDER BY determines which column is used to define the order of results. The default order is from low to high.

SELECT \* FROM sales\_item WHERE discount > .15 ORDER BY discount;

The following gives results from high to low

SELECT \* FROM sales\_item WHERE discount > .15 ORDER BY discount DESC;

**Limit**

LIMIT limits the number of rows in the result. Get just the top 5. You could use LIMIT 5, 10 to get the next 5

SELECT \* FROM sales\_item WHERE discount > .15 ORDER BY discount DESC LIMIT 5;

You can limit the results. Get the name, phone number and state where state is Texas. We can use CONCAT to merge to columns. We can then use AS to define a new column name.

SELECT CONCAT(first\_name, ' ', last\_name) AS Name, phone, state FROM customer WHERE state = 'TX';

You can perform calculations. Get the total value of all business shoes in inventory.

**GROUP BY**

SELECT product\_id, SUM(price) AS Total FROM item WHERE product\_id=1 GROUP BY product\_id;

**Distinct**

You can use distinct to eliminate duplicates in results. Get a list of states we have customers in.

SELECT DISTINCT state

FROM customer

ORDER BY state;

Find all states where we have customers not including 'CA'

SELECT DISTINCT state

FROM customer

WHERE state != 'CA'

ORDER BY state;

The IN phrase can be used to test if a value is in a list. Find customer states that are in my list. You can also use NOT IN.

SELECT DISTINCT state

FROM customer

WHERE state IN ('CA', 'NJ')

ORDER BY state;