ESSENTIAL SQL

BASICS

SELECT *
FROM edt.customers
Select all columns and rows from the customers table in the edt database

SELECT *
FROM customers
WHERE age > 21
AND state = 'PA'
Select all columns and rows from the customers table where the value in the age column is greater than 21 and the value in the state column is 'PA'

SELECT *
FROM customers
WHERE plan IN ("free", "basic")
Select all columns and rows from the customers table where the value in the plan column is "free" or "basic"

ORDER/GROUP

SELECT *
FROM customers
WHERE age > 21
ORDER BY age DESC
Select all columns and rows from the customers table where the value in the age column is greater than 21, and order the results by age starting with the highest value and DESC down

SELECT gender,
COUNT(*)
FROM students
GROUP BY gender
Select the gender column and the number of rows in the students table, and group by the value of the gender column

CASE STATEMENTS

SELECT name,
CASE WHEN age > 18 THEN "adult"
ELSE "minor" END "type"
FROM customers
Create a column called "type" which assigns whether someone is an "adult" or "minor" based on their age

SELECT name,
CASE WHEN sum(tenure) > 5 THEN 1
ELSE 0 END "flag"
FROM customers
Create a column called "flag" which assigns a 1 if someone's tenure is greater than 5 years

& MORE

SELECT MAX(age)
FROM customers
Select only the max age from the customers table

SELECT customers.name, orders.item
FROM customers
LEFT JOIN orders
ON customers.id = orders.customer_id
Join the customers table and orders table based on customer ID to select all instances of "name" from the customers table and show then associated "item" from the orders table.

EXPLORATORY

Here are some tricks to learning about what data is available in a table

HELP TABLE database.table
This will show you the names of all the columns in a table

SELECT * FROM database.table LIMIT 20
or
SELECT TOP 20 * FROM database.table
This will give you a sample of 20 rows from every column in the table