Mthree Alumni Training

Module 3: SQL and Finance

Trainer Notes
We will review the new methods here then go through demos and exercises to practice

Time/Date Functions

SQL provides us with a handy set of functions that allow us to work with time and dates in our queries.

Command	Comments
SELECT curdate(); SELECT current_date();	Returns YYYY-MM-DD
SELECT localtime(); SELECT now(); SELECT current_timestamp();	Returns YYYY-MM-DD HH:MM:SS
SELECT current_time(); SELECT curtime();	Returns HH:MM:SS
SELECT adddate("YYYY-MM-DD", INTERVAL 10 DAY); SELECT date_add("2020-03-21", INTERVAL 10 DAY);	Returns 10 days later than the given day
SELECT addtime("YYYY-MM-DD HH:MM:SS", "6");	Returns the date and time 6 seconds later

Time/Date Functions (continued)

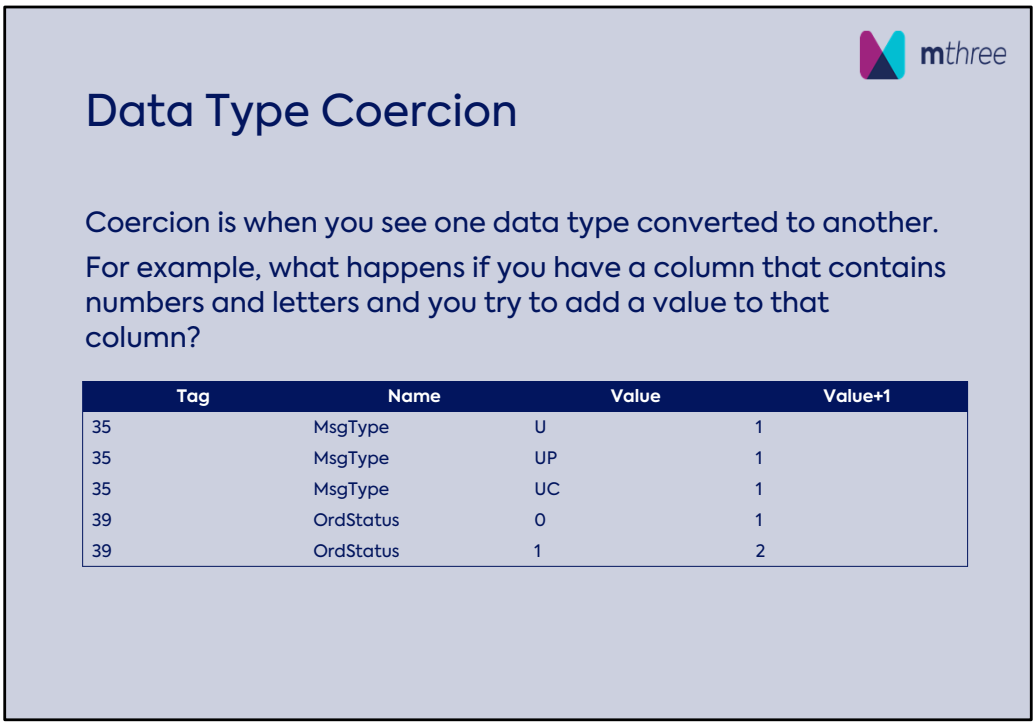
Command	Comments
SELECT date_format("YYYY-MM-DD", "%D");	Returns in this case the day in English e.g. 21st . Try with %Y and %M
SELECT date("2020-05-21 11:24:23 xyz");	Returns the date part of a string
SELECT week("2020-05-22");	Returns the week number of the year for a date
SELECT year("2019-12-11");	Returns the year out of date
SELECT datediff("YYYY-MM-DD", "YYYY-MM-DD");	Returns the number of days between two dates
SELECT date_sub("YYYY-MM-DD", INTERVAL 5 DAY);	Subtracts the number of days from the date provided
SELECT DAYNAME("YYYY-MM-DD");	Returns the day name, e.g., *Monday*
SELECT MONTHNAME("YYYY-MM-DD");	Returns the month name, e.g., *July*
SELECT DAYOFWEEK("YYYY-MM-DD"); SELECT DAYOFYEAR("YYYY-MM-DD");	Returns the index value for the day of the week or the day of the year

Time/Date Functions (continued)

Command	Comments
SELECT EXTRACT(MONTH FROM "YYYY-MM-DD");	Extracts the numerical value from the date provided – try year and day
SELECT FROM_DAYS(number);	Returns the date relative to the number of days provided (from date 0)
SELECT HOUR("YYYY-MM-DD HH:MM:SS ffd"); SELECT MINUTE("YYYY-MM-DD HH:MM:SS "); SELECT SECOND("YYYY-MM-DD HH:MM:SS ewet");	Pulls the relevant value out of a string
SELECT LAST_DAY("YYYY-MM-DD");	Returns the last day of the month provided in the date
SELECT MAKEDATE(YYYY, DD);	Returns a date based on the number of days and the year
SELECT MAKETIME(HH, MM, SS);	Will turn the values into time
SELECT STR_TO_DATE("August 30 2019", "%M %d %Y");	Returns a string as a date
SELECT TIME_TO_SEC("HH:MM:DD");	Converts a time into seconds
SELECT TIMEDIFF("HH:MM:DD", "HH:MM:DD");	Returns the time difference
SELECT WEEK("YYYY-MM-DD");	Returns week number
SELECT YEAR("YYYY-MM-DD");	Returns the year

Trainer/Trainee Notes

As you can see here the extra string will just be ignored in the HOUR/MINUTE/SECOND commands



Trainer/Trainee Notes

This is something you want to be aware of when doing any calculations on columns and looking for the results.