This is not mandatory reading, but here's the code we'll run in the "Semi-Structured Data" videos. It may come in handy when you're doing the associated hands-on assignment.

---> see an example of a column with semi-structured (JSON) data

SELECT MENU\_ITEM\_NAME

, MENU\_ITEM\_HEALTH\_METRICS\_OBJ

FROM tasty\_bytes.RAW\_POS.MENU;

DESCRIBE TABLE tasty\_bytes.RAW\_POS.MENU;

---> check out the data type for the menu\_item\_health\_metrics\_obj column – It’s a VARIANT

\*/

CREATE TABLE tasty\_bytes.raw\_pos.menu

(

menu\_id NUMBER(19,0),

menu\_type\_id NUMBER(38,0),

menu\_type VARCHAR(16777216),

truck\_brand\_name VARCHAR(16777216),

menu\_item\_id NUMBER(38,0),

menu\_item\_name VARCHAR(16777216),

item\_category VARCHAR(16777216),

item\_subcategory VARCHAR(16777216),

cost\_of\_goods\_usd NUMBER(38,4),

sale\_price\_usd NUMBER(38,4),

menu\_item\_health\_metrics\_obj VARIANT

);

\*/

---> create the test\_menu table with just a variant column in it, as a test

CREATE TABLE tasty\_bytes.RAW\_POS.TEST\_MENU (cost\_of\_goods\_variant)

AS SELECT cost\_of\_goods\_usd::VARIANT

FROM tasty\_bytes.RAW\_POS.MENU;

---> notice that the column is of the VARIANT type

DESCRIBE TABLE tasty\_bytes.RAW\_POS.TEST\_MENU;

---> but the typeof() function reveals the underlying data type

SELECT TYPEOF(cost\_of\_goods\_variant) FROM tasty\_bytes.raw\_pos.test\_menu;

---> Snowflake lets you perform operations based on the underlying data type

SELECT cost\_of\_goods\_variant, cost\_of\_goods\_variant\*2.0 FROM tasty\_bytes.raw\_pos.test\_menu;

DROP TABLE tasty\_bytes.raw\_pos.test\_menu;

---> you can use the colon to pull out info from menu\_item\_health\_metrics\_obj

SELECT MENU\_ITEM\_HEALTH\_METRICS\_OBJ:menu\_item\_health\_metrics FROM tasty\_bytes.raw\_pos.menu;

---> use typeof() to see the underlying type

SELECT TYPEOF(MENU\_ITEM\_HEALTH\_METRICS\_OBJ) FROM tasty\_bytes.raw\_pos.menu;

SELECT MENU\_ITEM\_HEALTH\_METRICS\_OBJ, MENU\_ITEM\_HEALTH\_METRICS\_OBJ['menu\_item\_id'] FROM tasty\_bytes.raw\_pos.menu;