* Vertex AI
  + data exploration, analysis, visualization and machine learning.
  + Based on Jupyter
* CASTing
  + CAST() function is used to convert the type of a column.

SELECT \* FROM `bigquery-public-data.noaa\_gsod.gsod2021`

WHERE **CAST**(year AS INT64) = 2021

    AND **CAST**(mo AS INT64) = 8

    AND **CAST**(da AS INT64) = 12

    AND stn="994971" -- Boston

* CONCAT()
  + This only works with characters. If you need to concatenate integers or other types you can first convert their type with a CAST and then concatenate them.

SELECT **CONCAT**(year,"-",mo,"-",da) AS date2, \*

FROM `bigquery-public-data.noaa\_gsod.gsod2021`

WHERE CAST(year AS INT64) = 2021

    AND CAST(mo AS INT64) = 8

    AND CAST(da AS INT64) = 12

    AND stn="994971" -- Boston

* EXTRACT() & TIMESTAMP() Functions
* LAG

SELECT

    date,

    temp,

    LAG(temp) OVER(ORDER BY date) AS temp\_yesterday

FROM `bigquery-public-data.noaa\_gsod.gsod2021`

WHERE stn="994971" -- Boston

ORDER BY date

* IF(cond, true\_result, else\_result)