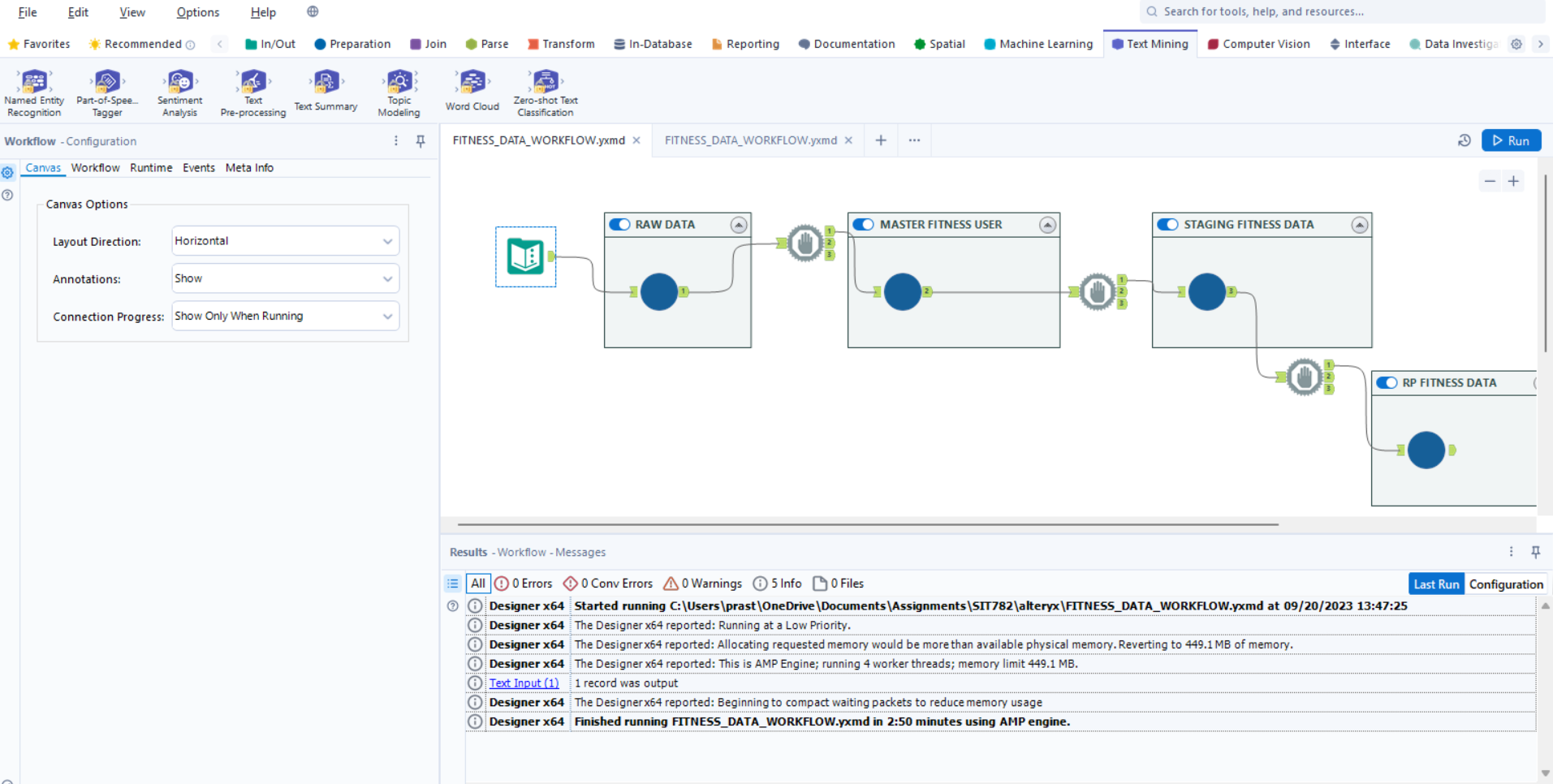
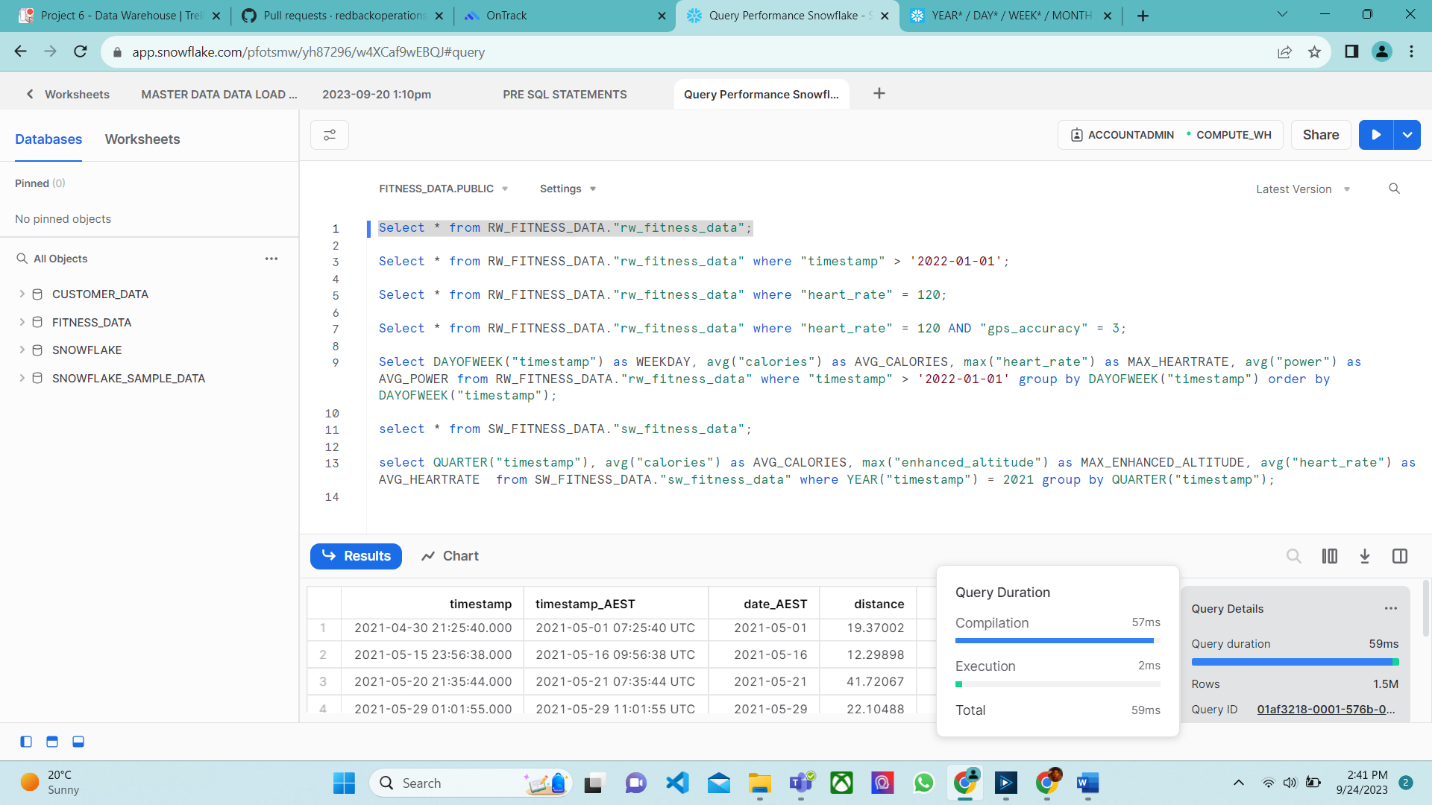
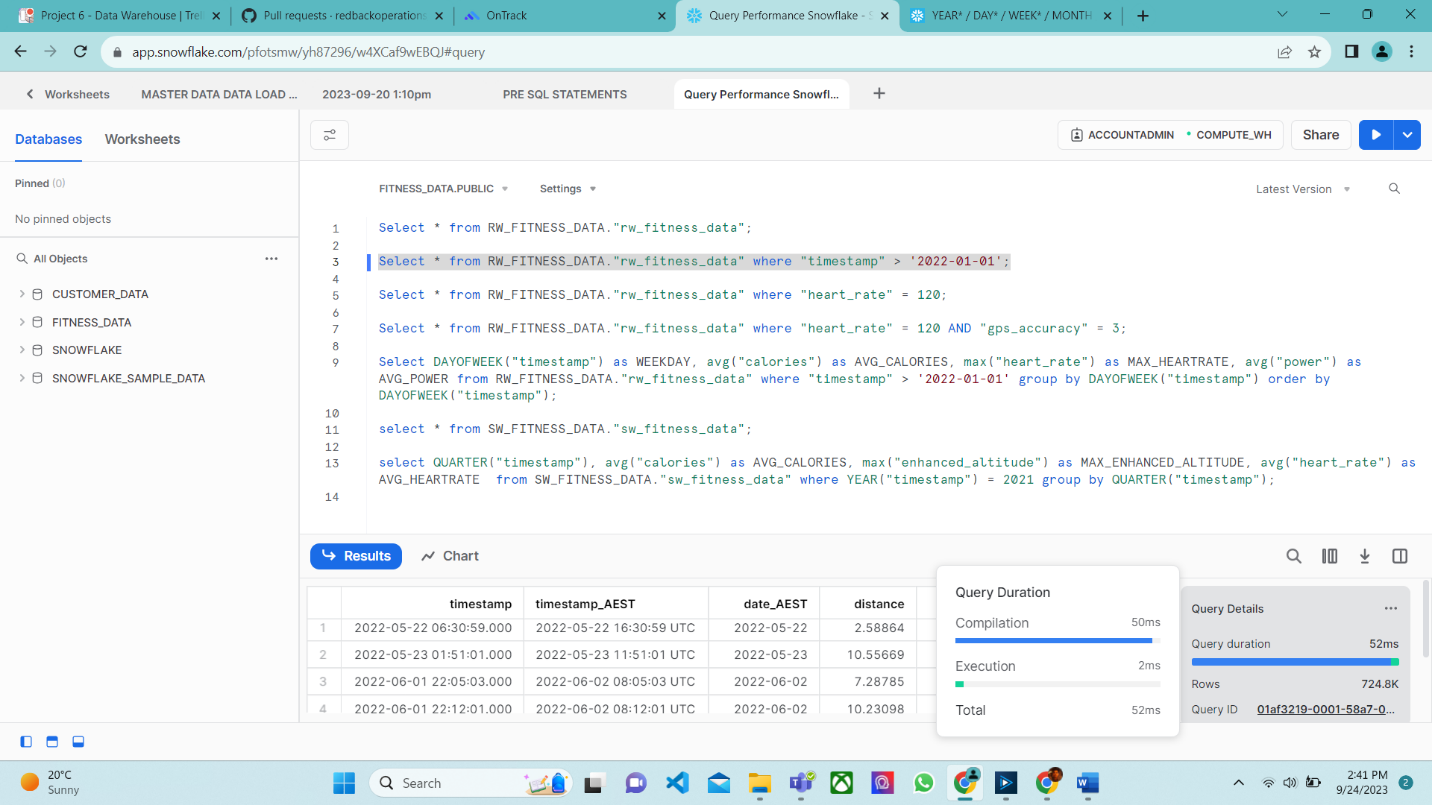
# Snowflake

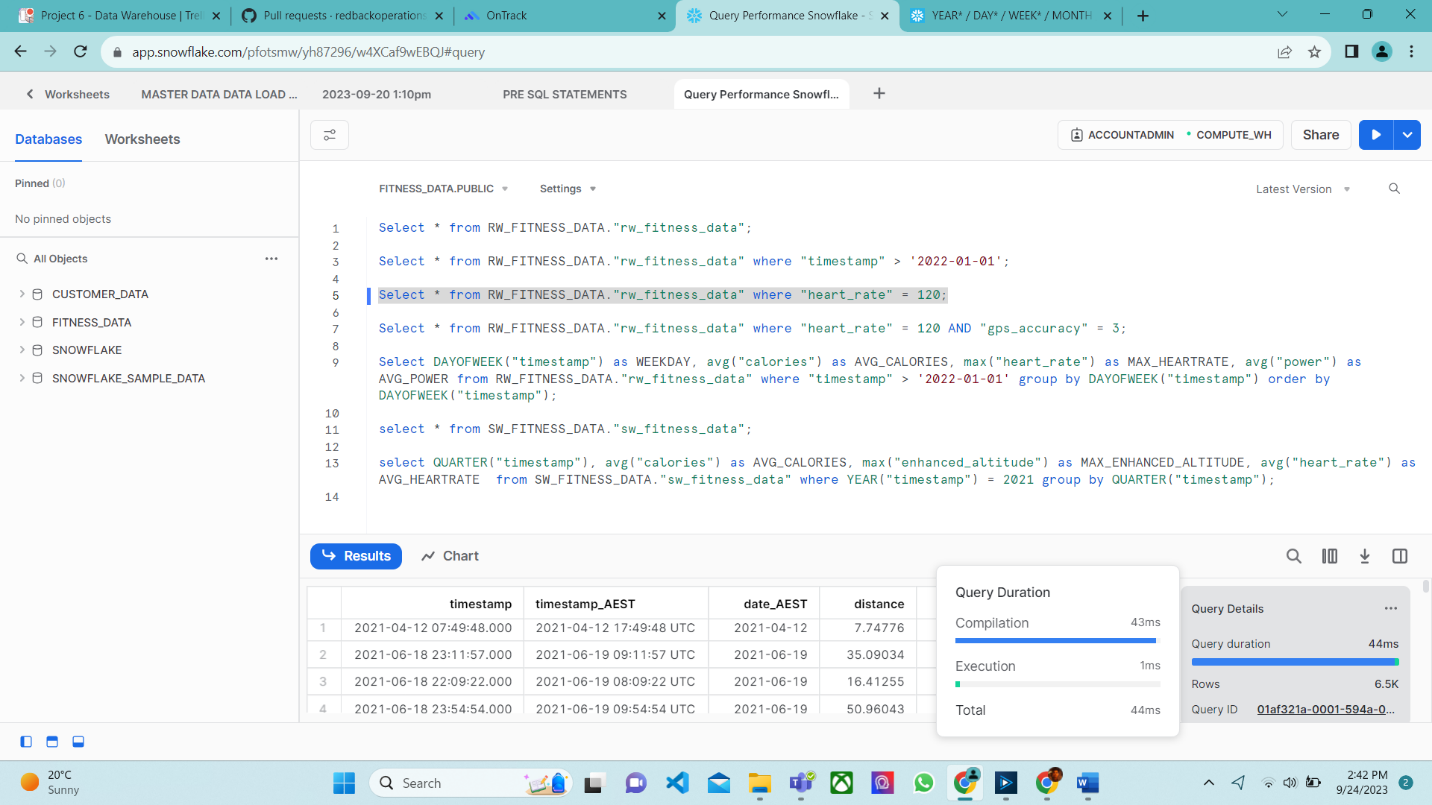
* Alteryx:
* “Select \* from RW\_FITNESS\_DATA."rw\_fitness\_data";”



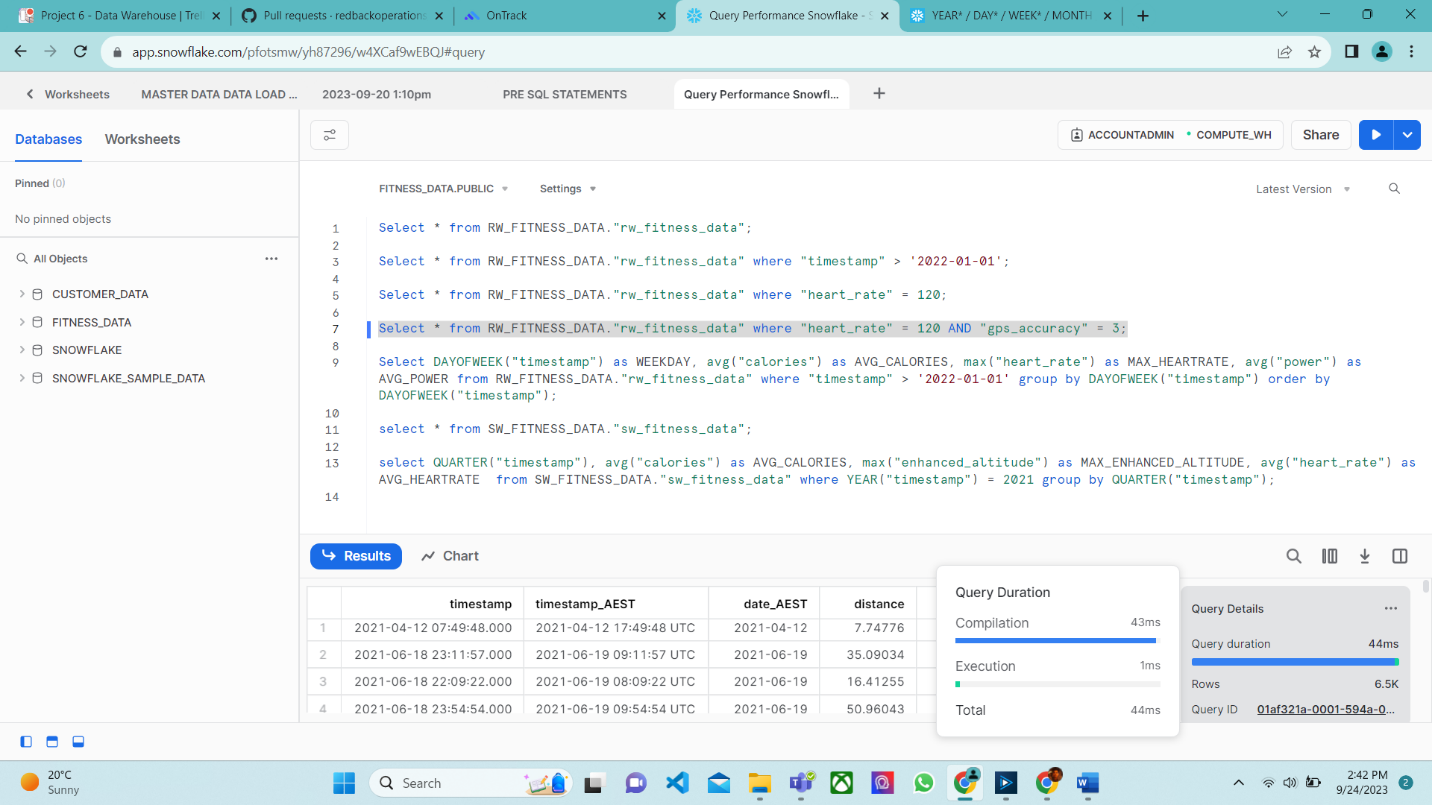
* “Select \* from RW\_FITNESS\_DATA."rw\_fitness\_data" where "timestamp" > '2022-01-01';”



* “Select \* from RW\_FITNESS\_DATA."rw\_fitness\_data" where "heart\_rate" = 120;”



* “Select \* from RW\_FITNESS\_DATA."rw\_fitness\_data" where "heart\_rate" = 120 AND "gps\_accuracy" = 3;”

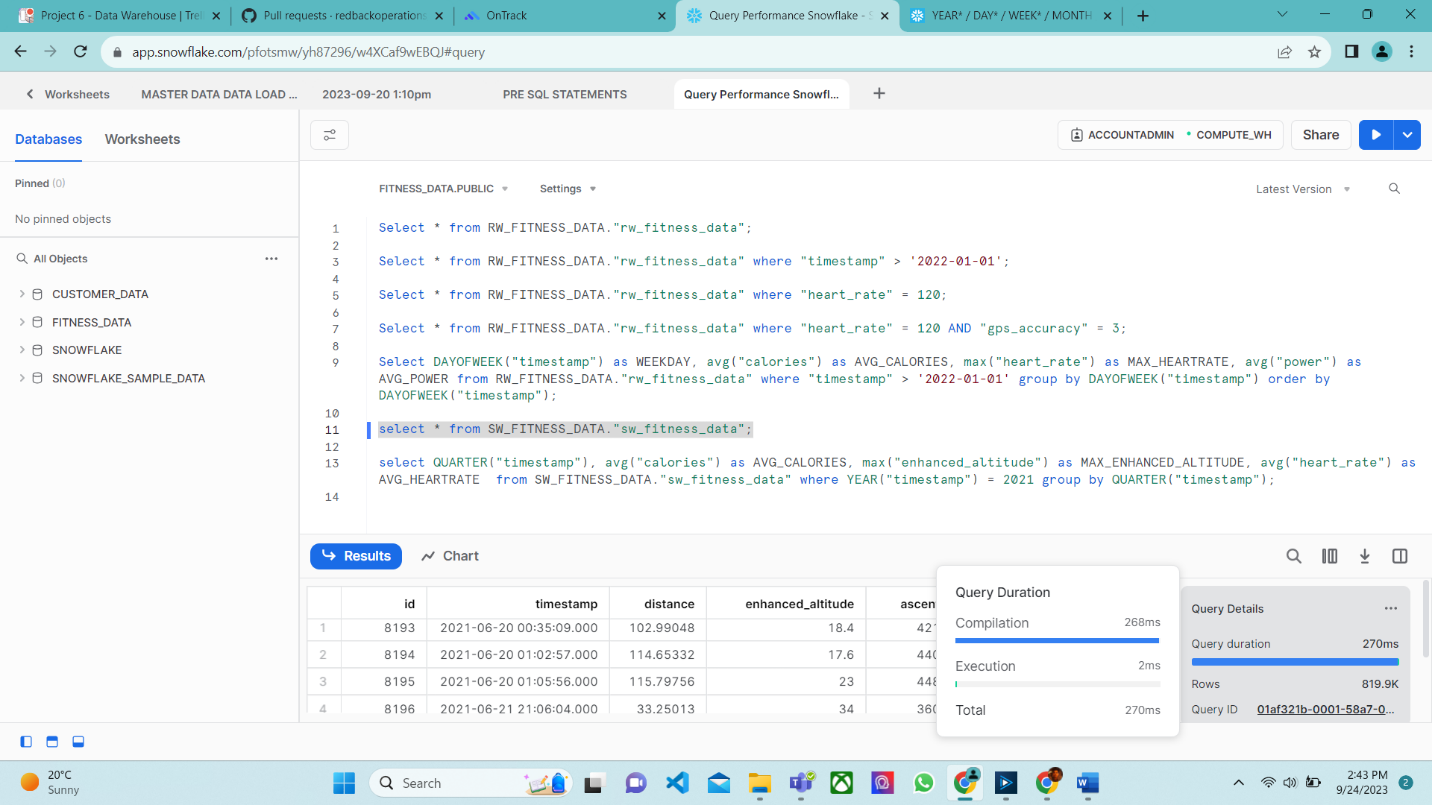


* “Select DAYOFWEEK("timestamp") as WEEKDAY, avg("calories") as AVG\_CALORIES, max("heart\_rate") as MAX\_HEARTRATE, avg("power") as AVG\_POWER from RW\_FITNESS\_DATA."rw\_fitness\_data" where "timestamp" > '2022-01-01' group by DAYOFWEEK("timestamp") order by DAYOFWEEK("timestamp");”

A screenshot of a computer

Description automatically generated

* “select \* from SW\_FITNESS\_DATA."sw\_fitness\_data";”



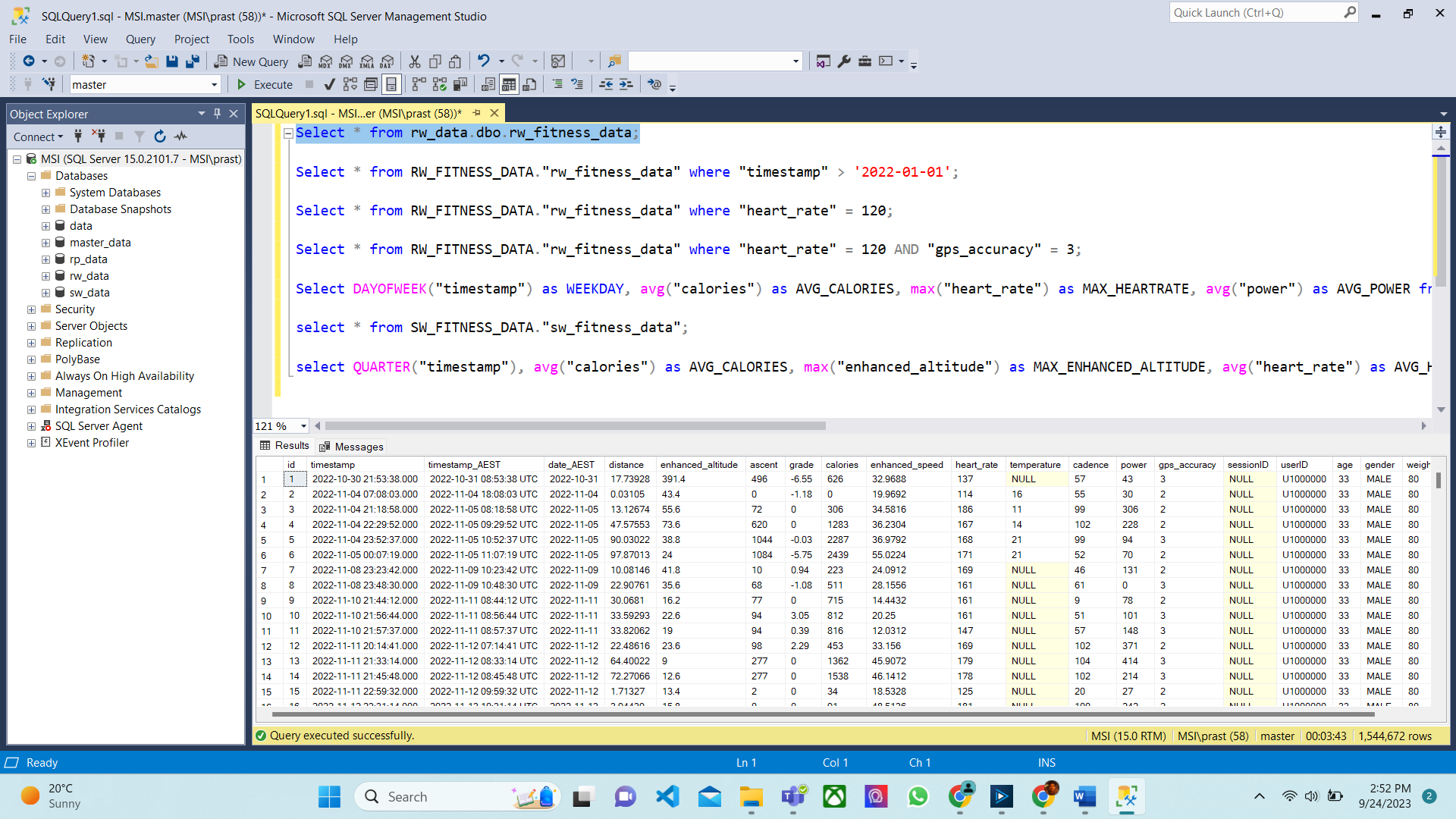
* “select QUARTER("timestamp"), avg("calories") as AVG\_CALORIES, max("enhanced\_altitude") as MAX\_ENHANCED\_ALTITUDE, avg("heart\_rate") as AVG\_HEARTRATE from SW\_FITNESS\_DATA."sw\_fitness\_data" where YEAR("timestamp") = 2021 group by QUARTER("timestamp");”A screenshot of a computer

  Description automatically generated

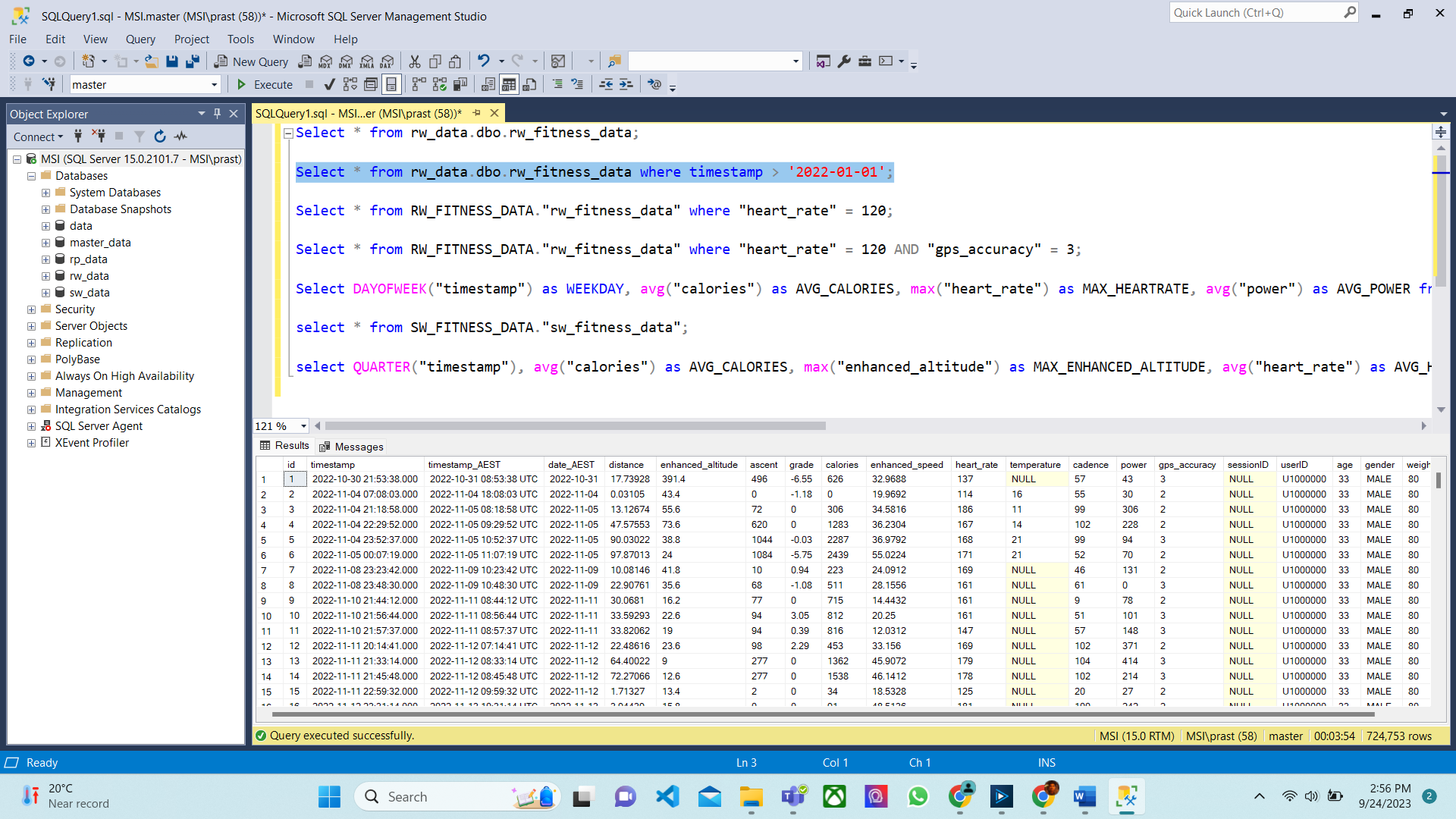
# SQL SERVER

* Alteryx:A screenshot of a computer

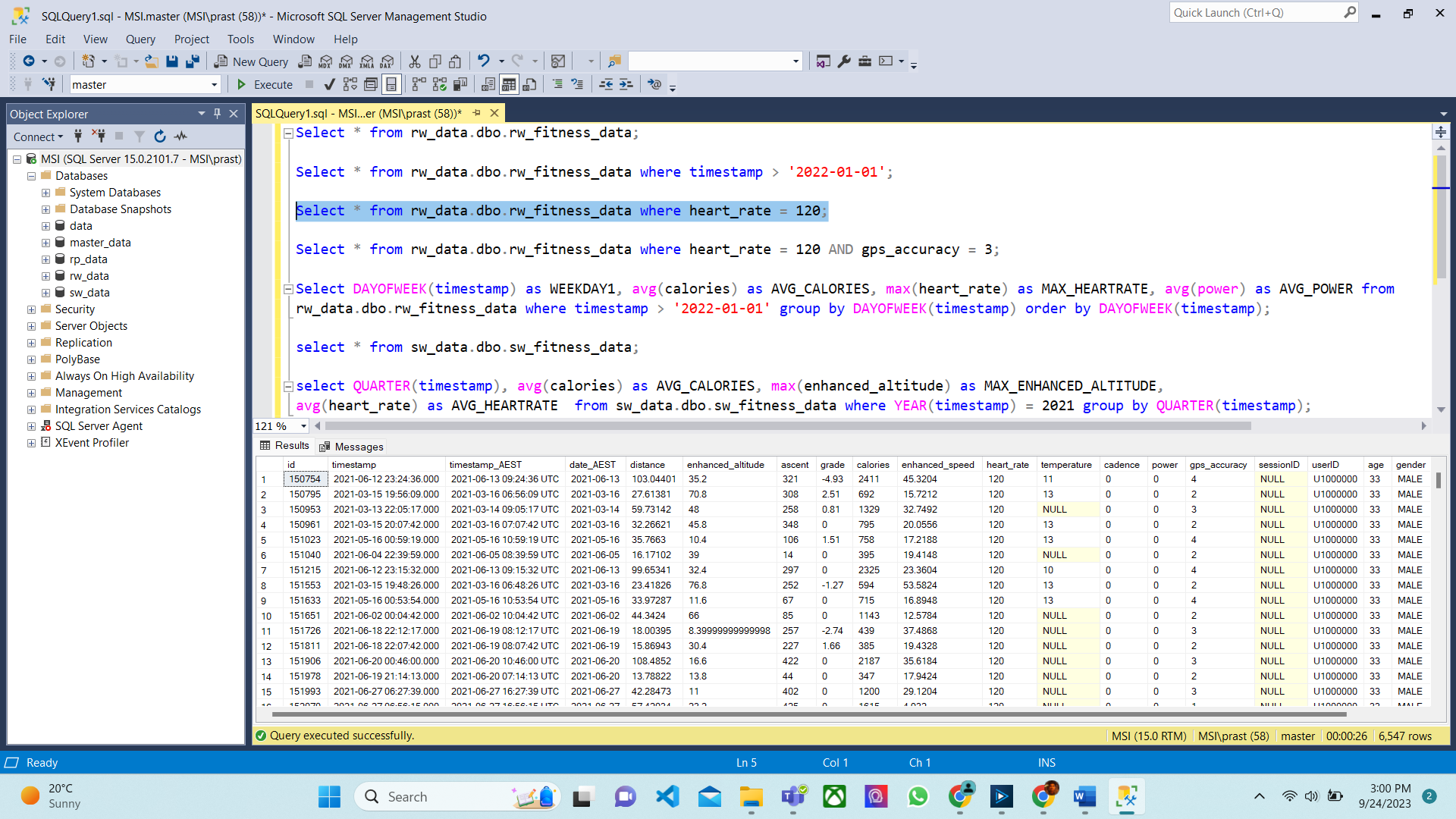
  Description automatically generated
* “Select \* from rw\_data.dbo.rw\_fitness\_data”;”



* “Select \* from rw\_data.dbo.rw\_fitness\_data where timestamp > '2022-01-01';”



* “Select \* from rw\_data.dbo.rw\_fitness\_data where heart\_rate = 120;”



* “Select \* from rw\_data.dbo.rw\_fitness\_data where heart\_rate = 120 AND gps\_accuracy = 3;”

A screenshot of a computer

Description automatically generated

* “Select DATEPART(dw, timestamp) as WEEKDAY1, avg(calories) as AVG\_CALORIES, max(heart\_rate) as MAX\_HEARTRATE, avg(power) as AVG\_POWER from

rw\_data.dbo.rw\_fitness\_data where timestamp > '2022-01-01' group by DATEPART(dw, timestamp) order by DATEPART(dw, timestamp);”

A screenshot of a computer

Description automatically generated

* “select \* from sw\_data.dbo.sw\_fitness\_data;”

A screenshot of a computer

Description automatically generated

* “select DATEPART(Q, timestamp), avg(calories) as AVG\_CALORIES, max(enhanced\_altitude) as MAX\_ENHANCED\_ALTITUDE,

avg(heart\_rate) as AVG\_HEARTRATE from sw\_data.dbo.sw\_fitness\_data where YEAR(timestamp) = 2021 group by DATEPART(Q, timestamp);”

A screenshot of a computer

Description automatically generated

# Conclusion

Based on our comparative analysis of Snowflake and Microsoft SQL Server (MSSQL) performance with the above evidences, it is evident that Snowflake outperformed MSSQL significantly in terms of query processing and execution, resulting in a notable reduction of around 3 minutes in the Alteryx workflow runtime. This outcome strongly suggests that Snowflake is a more efficient and faster option for data warehousing in our specific use case. As organizations increasingly rely on timely data insights for informed decision-making, the superior performance of Snowflake can translate into enhanced productivity, better analytics, and ultimately a competitive advantage. Therefore, adopting Snowflake as our data warehousing solution appears to be a prudent choice, ensuring optimal data processing and analysis capabilities for our organization.