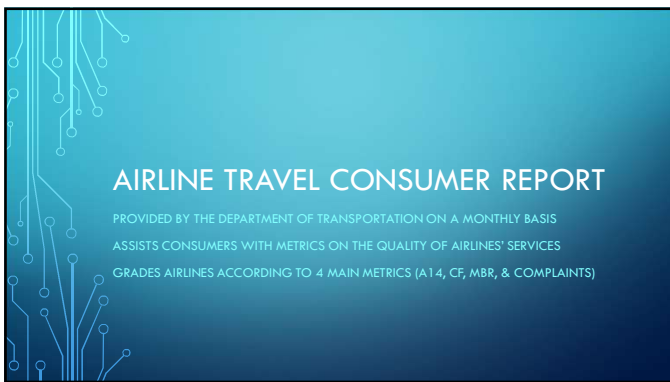


INTRODUCTION

DATA
ANALYSIS
DECISIONS



AIRLINE TRAVEL CONSUMER REPORT

PROVIDED BY THE DEPARTMENT OF TRANSPORTATION ON A MONTHLY BASIS
ASSISTS CONSUMERS WITH METRICS ON THE QUALITY OF AIRLINES' SERVICES
GRADES AIRLINES ACCORDING TO 4 MAIN METRICS (A14, CF, MBR, & COMPLAINTS)



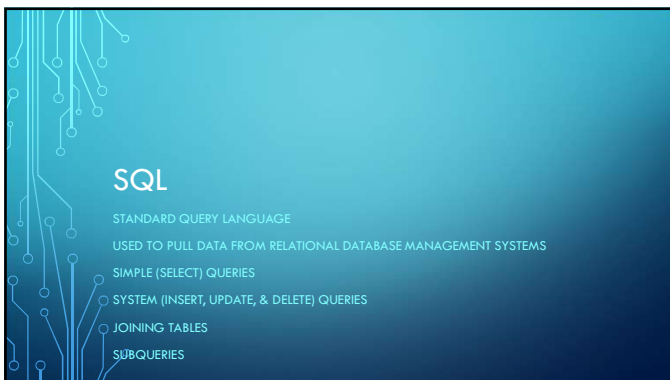
AIRLINE TRAVEL CONSUMER REPORT

A14 – % OF FLIGHT THAT ARRIVE WITHIN 14 MINUTES OF SCHEDULED ARRIVAL TIME
CF – % OF FLIGHTS THAT ARE NOT CANCELLED
MBR – NUMBER OF MISHANDLED BAGS PER 10,000 PASSENGERS
COMPLAINTS – NUMBER OF COMPLAINTS FILED PER 100,000 PASSENGERS



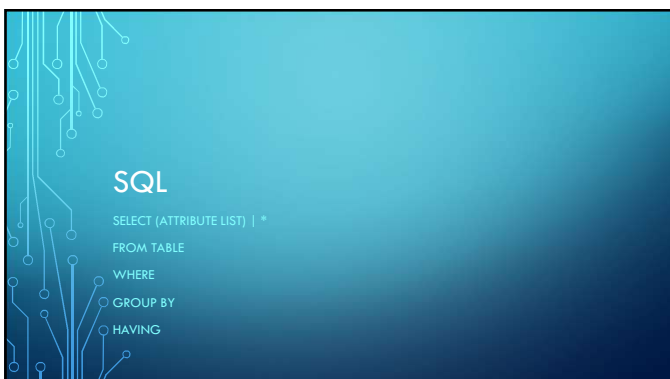
ON-TIME FLIGHT PERFORMANCE DATA

- PROVIDED BY THE DEPARTMENT OF TRANSPORTATION ON A MONTHLY BASIS
- MAJOR AIRLINES ARE REQUIRED TO SUBMIT TO THE DOT ON A MONTHLY BASIS
- PROVIDES DETAILS ON EVERY MAJOR AIRLINE SCHEDULED FLIGHT OPERATION
- USED TO CALCULATE PERFORMANCE METRICS EXCEPT MBR & COMPLAINTS
- AN ANALYSIS & COMPARISON IS CONDUCTED ON A PARTICULAR MARKET
- CONSUMERS ARE ABLE TO DETERMINE THE BEST PERFORMING AIRLINE



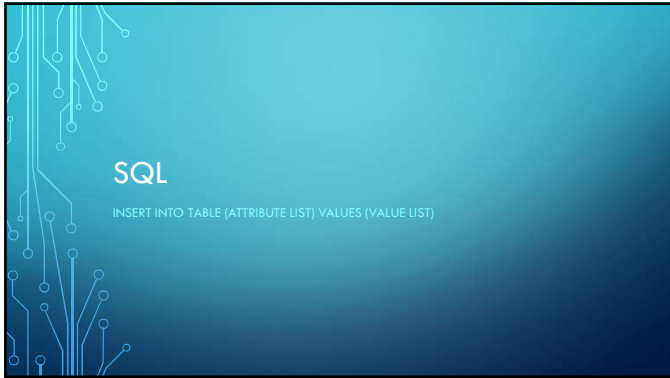
SQL

- STANDARD QUERY LANGUAGE
- USED TO PULL DATA FROM RELATIONAL DATABASE MANAGEMENT SYSTEMS
- SIMPLE (SELECT) QUERIES
- SYSTEM (INSERT, UPDATE, & DELETE) QUERIES
- JOINING TABLES
- SUBQUERIES

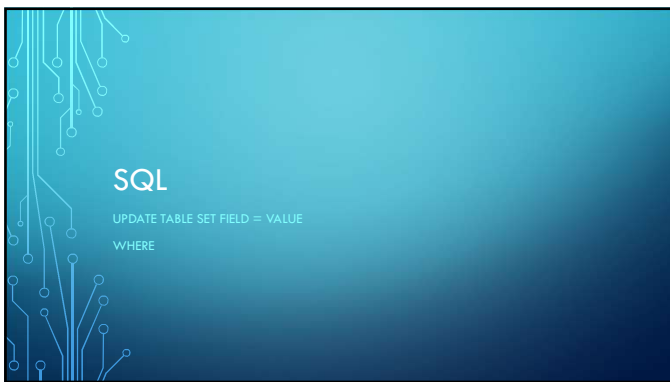


SQL

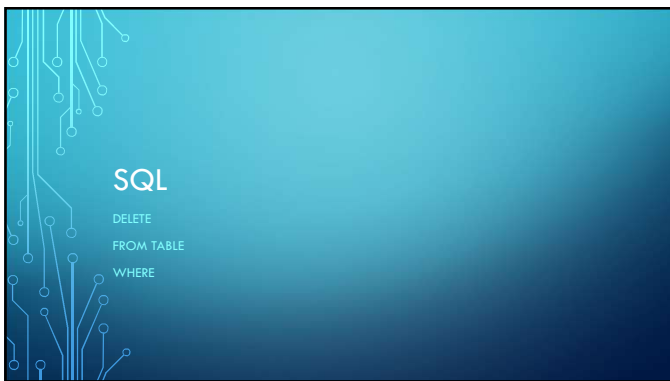
- SELECT (ATTRIBUTE LIST) | *
- FROM TABLE
- WHERE
- GROUP BY
- HAVING



SQL
INSERT INTO TABLE (ATTRIBUTE LIST) VALUES (VALUE LIST)



SQL
UPDATE TABLE SET FIELD = VALUE
WHERE

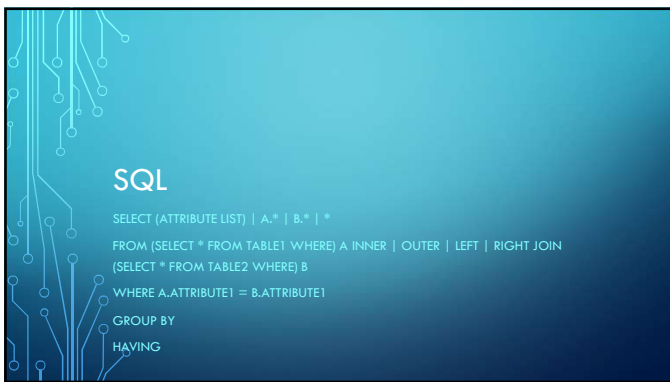


SQL
DELETE FROM TABLE
WHERE



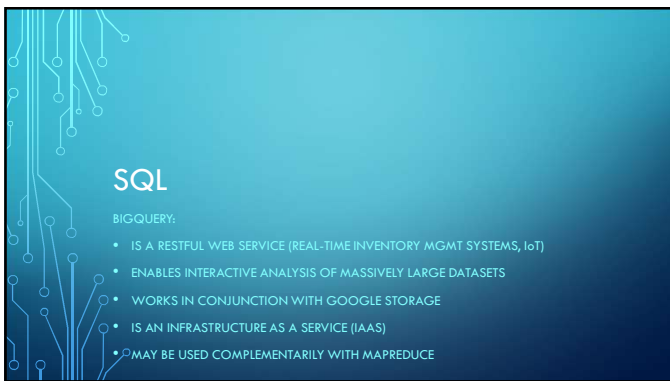
SQL

```
SELECT (ATTRIBUTE LIST) | A.* | B.* | *  
FROM TABLE1 A INNER | OUTER | LEFT | RIGHT JOIN TABLE2 B  
WHERE A.ATTRIBUTE1 = B.ATTRIBUTE1  
GROUP BY  
HAVING
```



SQL

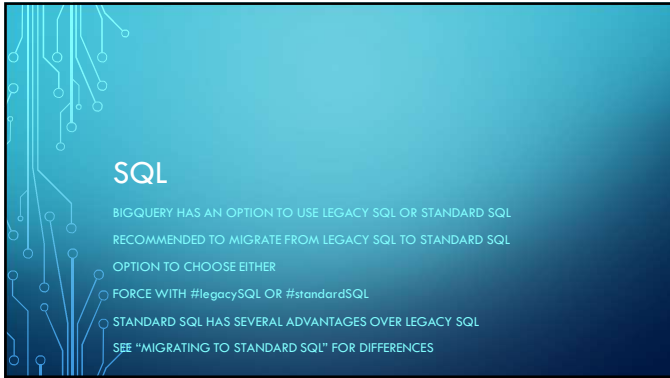
```
SELECT (ATTRIBUTE LIST) | A.* | B.* | *  
FROM (SELECT * FROM TABLE1 WHERE) A INNER | OUTER | LEFT | RIGHT JOIN  
(SELECT * FROM TABLE2 WHERE) B  
WHERE A.ATTRIBUTE1 = B.ATTRIBUTE1  
GROUP BY  
HAVING
```



SQL

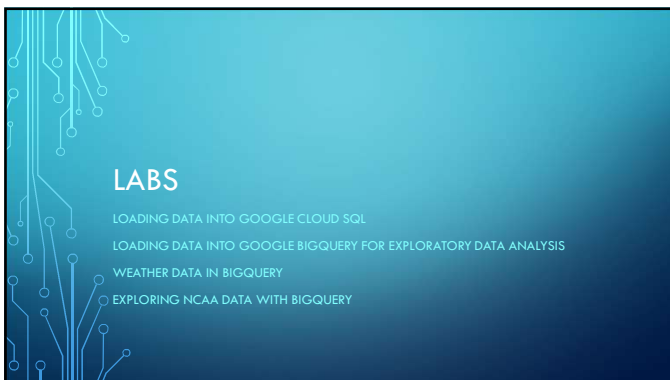
BIGQUERY:

- IS A RESTFUL WEB SERVICE (REAL-TIME INVENTORY MGMT SYSTEMS, IoT)
- ENABLES INTERACTIVE ANALYSIS OF MASSIVELY LARGE DATASETS
- WORKS IN CONJUNCTION WITH GOOGLE STORAGE
- IS AN INFRASTRUCTURE AS A SERVICE (IAAS)
- MAY BE USED COMPLEMENTARILY WITH MAPREDUCE



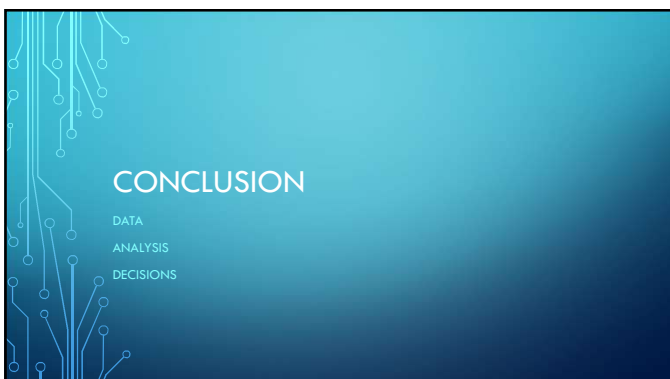
SQL

- BIGQUERY HAS AN OPTION TO USE LEGACY SQL OR STANDARD SQL
- RECOMMENDED TO MIGRATE FROM LEGACY SQL TO STANDARD SQL
- OPTION TO CHOOSE EITHER
 - FORCE WITH #legacySQL OR #standardSQL
 - STANDARD SQL HAS SEVERAL ADVANTAGES OVER LEGACY SQL
 - SEE "MIGRATING TO STANDARD SQL" FOR DIFFERENCES



LABS

- LOADING DATA INTO GOOGLE CLOUD SQL
- LOADING DATA INTO GOOGLE BIGQUERY FOR EXPLORATORY DATA ANALYSIS
- WEATHER DATA IN BIGQUERY
- EXPLORING NCAA DATA WITH BIGQUERY



CONCLUSION

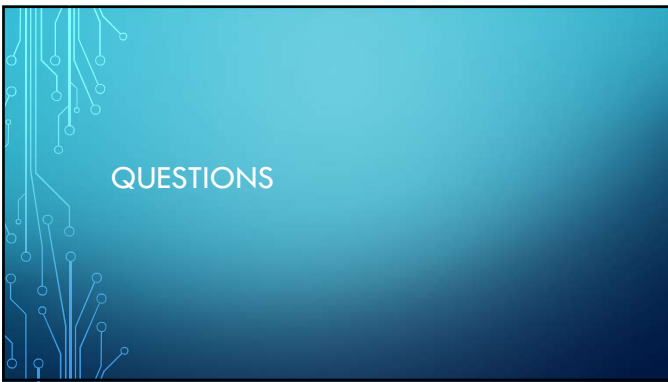
- DATA
- ANALYSIS
- DECISIONS



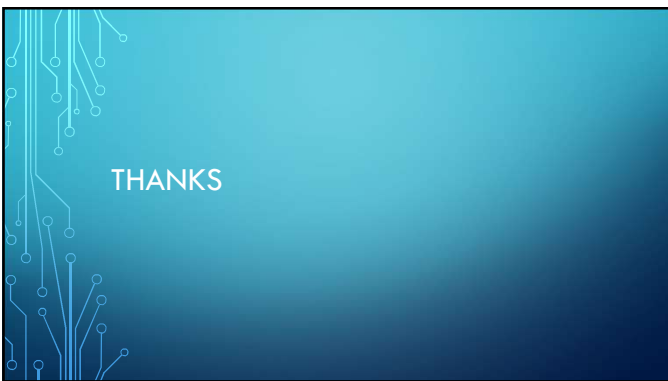
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UNITED STATES. DEPARTMENT OF TRANSPORTATION. AIRLINE TRAVEL CONSUMER REPORT. WASHINGTON, D.C.: UNITED STATES, 1999. WEB. 13 JULY 2018.

UNITED STATES. BUREAU OF TRANSPORTATION STATISTICS. AIRLINE SERVICE QUALITY PERFORMANCE 234 (ON-TIME PERFORMANCE DATA). WASHINGTON, D.C.: UNITED STATES, 1999. WEB. 13 JULY 2018.



QUESTIONS



THANKS
