A Mini-Project in Big Data Analytics on Google Cloud in Hive

BE COMPS

TITLE:

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Dataset: *world_war_2_aircrafts*

Attributes : aircraft_type

aircraft_subtype

aircraft_name

year_in_service

country_of_origin

operators

EXECUTION#

Query#1: To create and describe the table

Commands:

CREATE EXTERNAL TABLE dataset

      (aircraft_type VARCHAR(25),

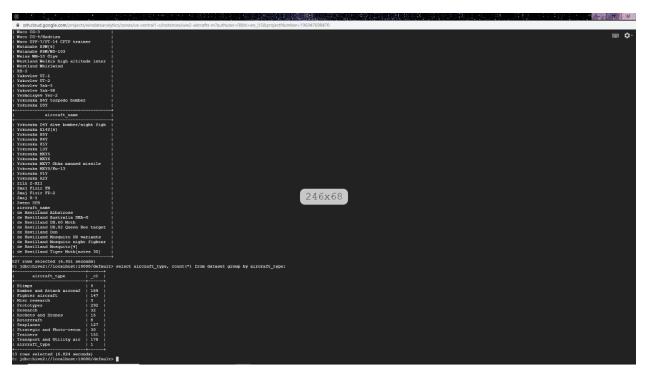   aircraft_subtype VARCHAR(25),

      aircraft_name VARCHAR(35),

      year_in_service BIGINT,

      operators VARCHAR(100))

ROW FORMAT DELIMITED FIELDS TERMINATED BY ','

LOCATION 'gs://ww2_csv_bucket/';

describe dataset;

Query#2: Display the types of aircrafts along with their count

Command: select distinct aircraft_type, count(*) from dataset group by aircraft_type;

Query#3: Display the inaugural years for each aircraft types

Command: select aircraft_type, MIN(year_in_service) as inaugural_year from dataset group by aircraft_type;
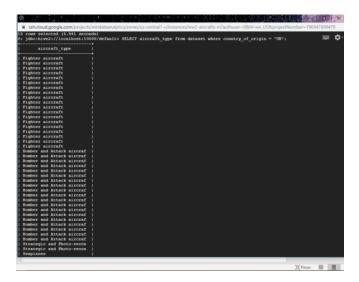
Query#4: Display the final years for each aircraft types

Command: select aircraft_type, MAX(year_in_service) as final_year from dataset group by aircraft_type;

Query#5: Select an attribute with a given condition

Command: SELECT aircraft_type from dataset where country_of_origin = 'UK';

Query#6: Display the duration of service of each aircraft types

Command: SELECT aircraft_type, (MAX(year_in_service) - MIN(year_in_service)) as Duration_of_Service FROM dataset group by aircraft_type;

Query#6: Order aircrafts by country

Command: SELECT aircraft_type, country_of_origin FROM dataset ORDER BY country_of_origin;

```
Strategic and Photo-recon  | USSR                    |
Prototypes                 | USSR                    |
Prototypes                 | USSR                    |
Bomber and Attack aircraf  | USSR                    |
Transport and Utility air  | USSR                    |
Seaplanes                  | USSR                    |
Bomber and Attack aircraf  | USSR                    |
Prototypes                 | USSR                    |
Prototypes                 | USSR                    |
Trainers                   | USSR                    |
Transport and Utility air  | USSR                    |
Prototypes                 | USSR                    |
Prototypes                 | USSR                    |
Fighter aircraft           | USSR                    |
Bomber and Attack aircraf  | USSR                    |
Fighter aircraft           | USSR                    |
Fighter aircraft           | USSR                    |
Fighter aircraft           | USSR                    |
Prototypes                 | USSR                    |
Prototypes                 | USSR                    |
Bomber and Attack aircraf  | USSR                    |
Prototypes                 | USSR                    |
Prototypes                 | USSR                    |
Trainers                   | USSR                    |
Prototypes                 | VEF I-16                |
Prototypes                 | VL Humu                 |
Prototypes                 | VL Pyörremyrsky         |
Prototypes                 | XP-1                    |
Trainers                   | Yugoslavia              |
Prototypes                 | Yugoslavia              |
Trainers                   | Yugoslavia              |
Trainers                   | Yugoslavia              |
Seaplanes                  | Yugoslavia              |
Trainers                   | Yugoslavia              |
Prototypes                 | Yugoslavia              |
Prototypes                 | Yugoslavia              |
Prototypes                 | Yugoslavia              |
Trainers                   | Yugoslavia              |
Seaplanes                  | Yugoslavia              |
Seaplanes                  | Yugoslavia              |
Seaplanes                  | Yugoslavia              |
aircraft_type              | country_of_origin       |
Prototypes                 | de Havilland Vampire    |
+---------------------------+-------------------------+
177 rows selected (6.309 seconds)
0: jdbc:hive2://localhost:10000/default>
```