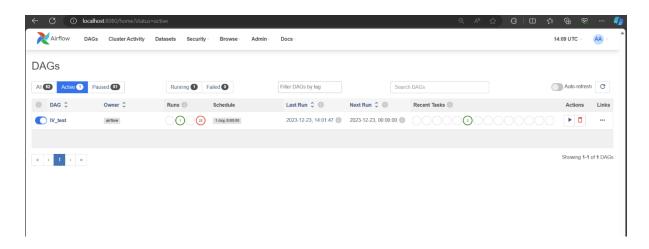
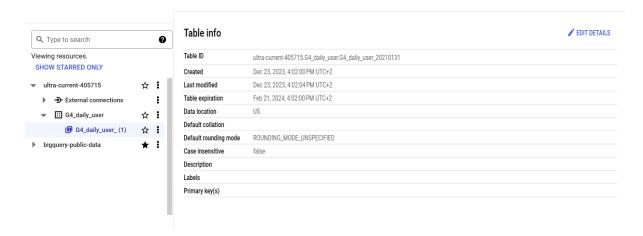
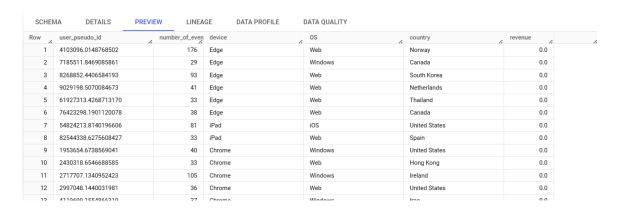
Successfully running the process from Airflow.



## Big\_query information stored under my own data project



## **Table information**



## **DAG Codes:**

```
#Import libraries
from google.cloud import bigquery
from airflow.operators.python_operator import PythonOperator
from airflow.contrib.operators.bigquery_check_operator import
BigQueryCheckOperator
import pandas as pd
from google.oauth2 import service_account
from numpy import abs as np_abs
from airflow import DAG
import datetime as dt
#Define arguments
default_args = {
    'retries': 2,
    'retry_delay': dt.timedelta(minutes=1),
    'email_on_retry': False,
    'email_on_failure': False,
dag = DAG(
    'IV_test', # Name that appears in Airflow
    default_args=default_args,
    start_date=dt.datetime(2021, 1, 31),
    schedule_interval=dt.timedelta(days=1),
    catchup=True
#Define a function which includes the entire ETL process
def run_etl(ds=None):
    ####### EXCTRACT##########
    credentials = service_account.Credentials.from_service_account_file(
        '/opt/airflow/dags/ultra-current-405715-8ef648399261.json')
    projectid = "ultra-current-405715" # Use your own id!
    sq1 = """
    SELECT user_pseudo_id,
            count(*) as number of events,
            max(device.mobile_model_name) as device,
            max(device.operating system) as OS,
            max(geo.country) as country,
            sum(user ltv.revenue) as revenue
```

```
FROM `bigquery-public-
data.ga4 obfuscated sample ecommerce.events 20210131`
    group by user pseudo id
    ORDER BY revenue desc
    df raw = pd.read gbq(sql, projectid, credentials=credentials)
    df raw.to gbq('G4 daily user.G4 daily user 20210131',
                 project_id='ultra-current-405715', if_exists='replace')
# BigQueryCheckOperator check that the SQL inside returns a single row
# This case basically that the data exists
t1 = BigQueryCheckOperator(
    task_id="check_bigquery", # Appears in Airflow
    sq1="""
    SELECT COUNT(*) FROM `bigquery-public-
data.ga4_obfuscated_sample_ecommerce.events_20210131`
    use_legacy_sql=False,
   dag=dag,
    # https://www.revisitclass.com/gcp/how-to-configure-google-cloud-bigquery-
connection-in-apache-airflow/
    gcp_conn_id="gcp_bq_con" # Authentication
# Call function run_etl
t2 = PythonOperator(
   task_id="run_etl", # Appears in Airflow
    python_callable=run_etl,
    dag=dag
t1 >> t2 # task 1 needs to be completed before task 2
```