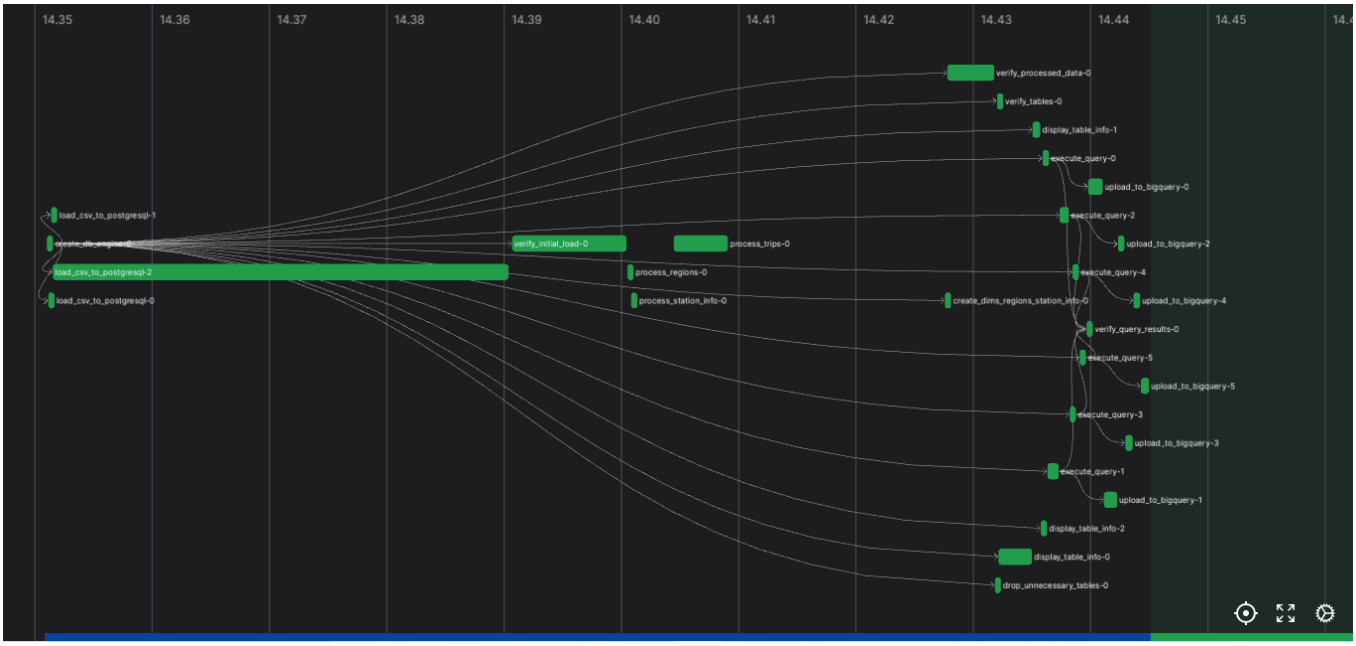
Capture PREFECT




```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

                    > & C:/Users/HP/AppData/Local/Programs/Python/Python312/python.exe c:/Users/HP/bikeshare/bikesharePrefect.py
14:35:05.812 | INFO    | prefect.engine - Created flow run 'magnificent-lion' for flow 'bikeshare-etl'
14:35:06.387 | INFO    | Flow run 'magnificent-lion' - Created task run 'create_db_engine-0' for task 'create_db_engine'
14:35:06.387 | INFO    | Flow run 'magnificent-lion' - Executing 'create_db_engine-0' immediately...
14:35:06.936 | INFO    | Task run 'create_db_engine-0' - Finished in state Completed()
14:35:07.139 | INFO    | Flow run 'magnificent-lion' - Created task run 'load_csv_to_postgresql-0' for task 'load_csv_to_postgresql'
14:35:07.139 | INFO    | Flow run 'magnificent-lion' - Executing 'load_csv_to_postgresql-0' immediately...
14:35:08.314 | INFO    | Task run 'load_csv_to_postgresql-0' - Finished in state Completed()
14:35:08.537 | INFO    | Flow run 'magnificent-lion' - Created task run 'load_csv_to_postgresql-1' for task 'load_csv_to_postgresql'
14:35:08.553 | INFO    | Flow run 'magnificent-lion' - Executing 'load_csv_to_postgresql-1' immediately...
14:35:09.211 | INFO    | Task run 'load_csv_to_postgresql-1' - Finished in state Completed()
14:35:09.376 | INFO    | Flow run 'magnificent-lion' - Created task run 'load_csv_to_postgresql-2' for task 'load_csv_to_postgresql'
14:35:09.391 | INFO    | Flow run 'magnificent-lion' - Executing 'load_csv_to_postgresql-2' immediately...
14:39:03.589 | INFO    | Task run 'load_csv_to_postgresql-2' - Finished in state Completed()
14:39:04.225 | INFO    | Flow run 'magnificent-lion' - Created task run 'verify_initial_load-0' for task 'verify_initial_load'
14:39:04.225 | INFO    | Flow run 'magnificent-lion' - Executing 'verify_initial_load-0' immediately...

Verifikasi tabel regions:
Jumlah baris: 6
Kolom: ['region_id', 'name']
Sample data:
   region_id          name
0          3  San Francisco
1          5       San Jose
2         12        Oakland

Verifikasi tabel station_info:
Jumlah baris: 472
Kolom: ['station_id', 'name', 'short_name', 'lat', 'lon', 'region_id', 'rental_methods', 'capacity', 'external_id', 'eightd_has_key_di
spenser', 'has_kiosk', 'station_geom']
Sample data:
   station_id                                       name  ... has_kiosk                    station_geom
0         523       Lafayette Park (Laguna St at Washington St)  ...     False       POINT(-122.429315 37.791966)
1         501  Balboa Park (San Jose Ave at Sgt. John V. Youn...  ...     False  POINT(-122.443238497 37.724892684)
2         504                     Onondaga Ave at Alemany Blvd  ...     False  POINT(-122.438303232 37.721543666)
```

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PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

[3 rows x 12 columns]

Verifikasi tabel trips:
Jumlah baris: 1947417
Kolom: ['trip_id', 'duration_sec', 'start_date', 'start_station_name', 'start_station_id', 'end_date', 'end_station_name', 'end_statio
n_id', 'bike_number', 'zip_code', 'subscriber_type', 'c_subscription_type', 'start_station_latitude', 'start_station_longitude', 'end_
station_latitude', 'end_station_longitude', 'member_birth_year', 'member_gender', 'bike_share_for_all_trip', 'start_station_geom', 'en
d_station_geom']
Sample data:
             trip_id  duration_sec  ...                    start_station_geom                end_station_geom
0  201711111447202880           272  ...            POINT(-122.2555549 37.7958125)  POINT(-122.2487796 37.7927143)
1  201711181823281960           353  ...  POINT(-122.253810167313 37.8002135669698)  POINT(-122.2487796 37.7927143)
2  201804031521401409          1577  ...            POINT(-122.2651925 37.8113768)  POINT(-122.2487796 37.7927143)

[3 rows x 21 columns]
14:40:03.061 | INFO    | Task run 'verify_initial_load-0' - Finished in state Completed()
14:40:03.343 | INFO    | Flow run 'magnificent-lion' - Created task run 'process_regions-0' for task 'process_regions'
14:40:03.343 | INFO    | Flow run 'magnificent-lion' - Executing 'process_regions-0' immediately...
14:40:03.722 | INFO    | Task run 'process_regions-0' - Finished in state Completed()
14:40:05.259 | INFO    | Flow run 'magnificent-lion' - Created task run 'process_station_info-0' for task 'process_station_info'
14:40:05.259 | INFO    | Flow run 'magnificent-lion' - Executing 'process_station_info-0' immediately...
14:40:05.857 | INFO    | Task run 'process_station_info-0' - Finished in state Completed()
14:40:27.048 | INFO    | Flow run 'magnificent-lion' - Created task run 'process_trips-0' for task 'process_trips'
14:40:27.063 | INFO    | Flow run 'magnificent-lion' - Executing 'process_trips-0' immediately...
14:40:54.872 | INFO    | Task run 'process_trips-0' - Finished in state Completed()
14:42:45.699 | INFO    | Flow run 'magnificent-lion' - Created task run 'create_dims_regions_station_info-0' for task 'create_dims_reg
ions_station_info'
14:42:45.699 | INFO    | Flow run 'magnificent-lion' - Executing 'create_dims_regions_station_info-0' immediately...
14:42:46.859 | INFO    | Task run 'create_dims_regions_station_info-0' - Finished in state Completed()
14:42:46.959 | INFO    | Flow run 'magnificent-lion' - Created task run 'verify_processed_data-0' for task 'verify_processed_data'
14:42:46.959 | INFO    | Flow run 'magnificent-lion' - Executing 'verify_processed_data-0' immediately...

Verifikasi tabel fact_trips:
Jumlah baris: 963771
Kolom: ['trip_id', 'duration_sec', 'start_date', 'start_station_id', 'end_date', 'end_station_id', 'start_station_latitude', 'start_st
ation_longitude', 'end_station_latitude', 'end_station_longitude', 'start_station_geom', 'end_station_geom']
```

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PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

             trip_id  duration_sec  ...                    start_station_geom                end_station_geom
0  201711111447202880           272  ...            POINT(-122.2555549 37.7958125)  POINT(-122.2487796 37.7927143)
1  201711181823281960           353  ...  POINT(-122.253810167313 37.8002135669698)  POINT(-122.2487796 37.7927143)
2  201804031521401409          1577  ...            POINT(-122.2651925 37.8113768)  POINT(-122.2487796 37.7927143)

[3 rows x 12 columns]

Verifikasi tabel dims_trips_info:
Jumlah baris: 963771
Kolom: ['trip_id', 'bike_number', 'subscriber_type', 'member_birth_year', 'member_gender']
Sample data:
             trip_id  bike_number subscriber_type  member_birth_year member_gender
0  201711111447202880         2880      Subscriber             1965.0        Female
1  201711181823281960         1960      Subscriber             1988.0          Male
2  201804031521401409         1409      Subscriber             1966.0          Male

Verifikasi tabel dims_regions_station_info:
Jumlah baris: 463
Kolom: ['station_id', 'station_name', 'short_name', 'region_id', 'region_name', 'capacity', 'has_kiosk', 'station_geom', 'lat', 'lon']
Sample data:
   station_id           station_name short_name  region_id  ... has_kiosk                    station_geom        lat         lon
0         412  Glen Park BART Station     SF-W19        3.0  ...      True  POINT(-122.434140444 37.732812801)  37.732813 -122.434140
1         386  24th St at Bartlett St   SF-Q23-3        3.0  ...      True   POINT(-122.41972357 37.752104984)  37.752105 -122.419724
2         499     Otis St at Brady St     SF-K23        3.0  ...      True        POINT(-122.419976 37.772219)  37.772219 -122.419976

[3 rows x 10 columns]
14:43:11.044 | INFO    | Task run 'verify_processed_data-0' - Finished in state Completed()
14:43:11.212 | INFO    | Flow run 'magnificent-lion' - Created task run 'drop_unnecessary_tables-0' for task 'drop_unnecessary_tables'
14:43:11.212 | INFO    | Flow run 'magnificent-lion' - Executing 'drop_unnecessary_tables-0' immediately...
14:43:12.145 | INFO    | Task run 'drop_unnecessary_tables-0' - Finished in state Completed()
14:43:12.358 | INFO    | Flow run 'magnificent-lion' - Created task run 'verify_tables-0' for task 'verify_tables'
14:43:12.373 | INFO    | Flow run 'magnificent-lion' - Executing 'verify_tables-0' immediately...

Tabel-tabel yang tersedia di database setelah update:
- fact_trips
- dims_trips_info
- dims_regions_station_info
```

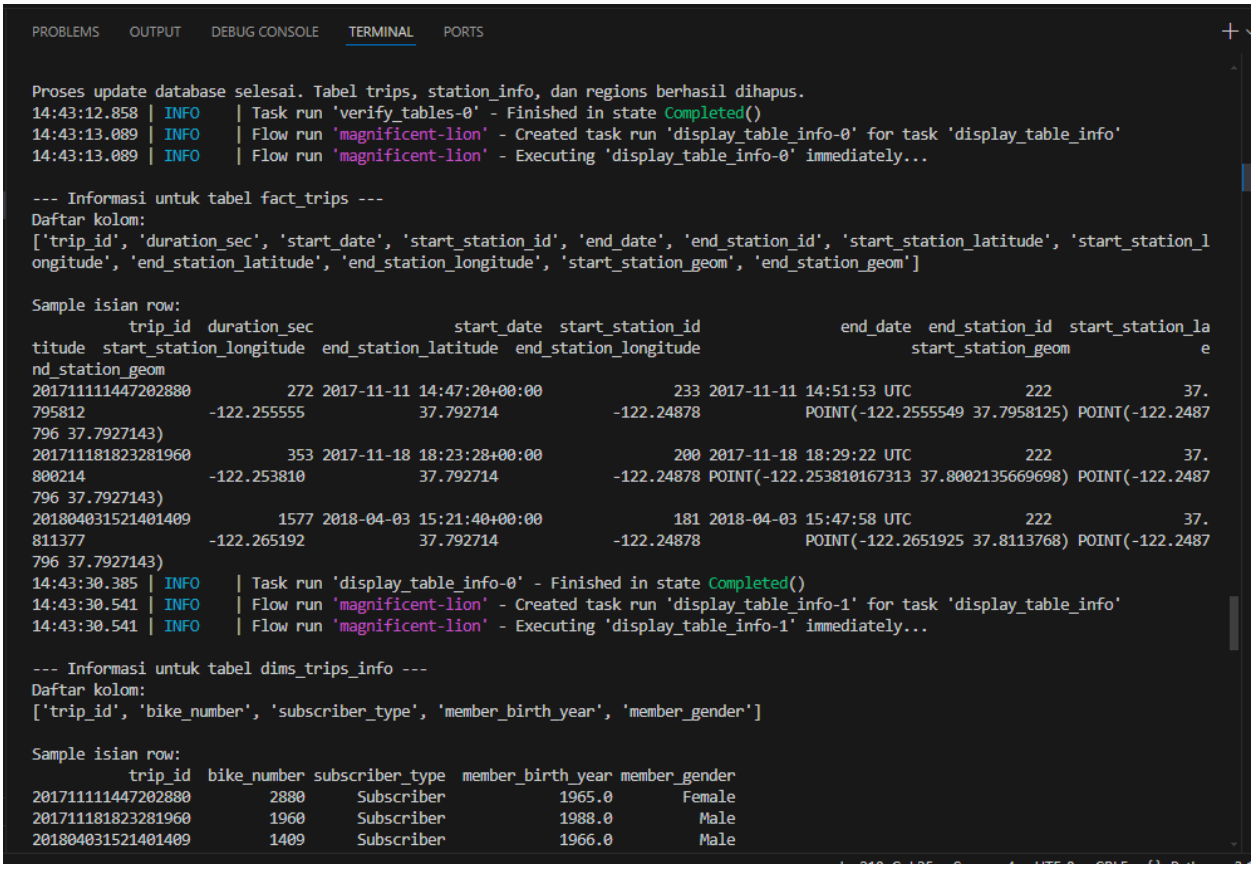

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PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

Proses update database selesai. Tabel trips, station_info, dan regions berhasil dihapus.
14:43:12.858 | INFO    | Task run 'verify_tables-0' - Finished in state Completed()
14:43:13.089 | INFO    | Flow run 'magnificent-lion' - Created task run 'display_table_info-0' for task 'display_table_info'
14:43:13.089 | INFO    | Flow run 'magnificent-lion' - Executing 'display_table_info-0' immediately...

--- Informasi untuk tabel fact_trips ---
Daftar kolom:
['trip_id', 'duration_sec', 'start_date', 'start_station_id', 'end_date', 'end_station_id', 'start_station_latitude', 'start_station_l
ongitude', 'end_station_latitude', 'end_station_longitude', 'start_station_geom', 'end_station_geom']

Sample isian row:
          trip_id  duration_sec               start_date  start_station_id               end_date  end_station_id  start_station_la
titude  start_station_longitude  end_station_latitude  end_station_longitude                      start_station_geom              e
nd_station_geom
201711111447202880           272 2017-11-11 14:47:20+00:00               233 2017-11-11 14:51:53 UTC             222              37.
795812              -122.255555             37.792714            -122.24878           POINT(-122.2555549 37.7958125) POINT(-122.2487
796 37.7927143)
201711181823281960           353 2017-11-18 18:23:28+00:00               200 2017-11-18 18:29:22 UTC             222              37.
800214              -122.253810             37.792714            -122.24878 POINT(-122.253810167313 37.8002135669698) POINT(-122.2487
796 37.7927143)
201804031521401409          1577 2018-04-03 15:21:40+00:00               181 2018-04-03 15:47:58 UTC             222              37.
811377              -122.265192             37.792714            -122.24878           POINT(-122.2651925 37.8113768) POINT(-122.2487
796 37.7927143)
14:43:30.385 | INFO    | Task run 'display_table_info-0' - Finished in state Completed()
14:43:30.541 | INFO    | Flow run 'magnificent-lion' - Created task run 'display_table_info-1' for task 'display_table_info'
14:43:30.541 | INFO    | Flow run 'magnificent-lion' - Executing 'display_table_info-1' immediately...

--- Informasi untuk tabel dims_trips_info ---
Daftar kolom:
['trip_id', 'bike_number', 'subscriber_type', 'member_birth_year', 'member_gender']

Sample isian row:
          trip_id  bike_number subscriber_type  member_birth_year member_gender
201711111447202880         2880      Subscriber             1965.0        Female
201711181823281960         1960      Subscriber             1988.0          Male
201804031521401409         1409      Subscriber             1966.0          Male
```

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PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

14:43:34.771 | INFO    | Flow run 'magnificent-lion' - Created task run 'display_table_info-2' for task 'display_table_info'
14:43:34.771 | INFO    | Flow run 'magnificent-lion' - Executing 'display_table_info-2' immediately...

--- Informasi untuk tabel dims_regions_station_info ---
Daftar kolom:
['station_id', 'station_name', 'short_name', 'region_id', 'region_name', 'capacity', 'has_kiosk', 'station_geom', 'lat', 'lon']

Sample isian row:
 station_id          station_name short_name  region_id   region_name  capacity  has_kiosk                      station_geom      l
at         lon
       412 Glen Park BART Station     SF-W19        3.0 San Francisco        40       True POINT(-122.434140444 37.732812801) 37.7328
13 -122.434140
       386 24th St at Bartlett St   SF-Q23-3        3.0 San Francisco        16       True  POINT(-122.41972357 37.752104984) 37.7521
05 -122.419724
       499    Otis St at Brady St     SF-K23        3.0 San Francisco        22       True       POINT(-122.419976 37.772219) 37.7722
19 -122.419976
14:43:35.266 | INFO    | Task run 'display_table_info-2' - Finished in state Completed()

Proses verifikasi tabel selesai.
14:43:35.760 | INFO    | Flow run 'magnificent-lion' - Created task run 'execute_query-0' for task 'execute_query'
14:43:35.760 | INFO    | Flow run 'magnificent-lion' - Executing 'execute_query-0' immediately...
14:43:37.912 | INFO    | Task run 'execute_query-0' - Finished in state Completed()
14:43:38.113 | INFO    | Flow run 'magnificent-lion' - Created task run 'execute_query-1' for task 'execute_query'
14:43:38.113 | INFO    | Flow run 'magnificent-lion' - Executing 'execute_query-1' immediately...
14:43:44.126 | INFO    | Task run 'execute_query-1' - Finished in state Completed()
14:43:44.341 | INFO    | Flow run 'magnificent-lion' - Created task run 'execute_query-2' for task 'execute_query'
14:43:44.341 | INFO    | Flow run 'magnificent-lion' - Executing 'execute_query-2' immediately...
14:43:49.301 | INFO    | Task run 'execute_query-2' - Finished in state Completed()
14:43:49.549 | INFO    | Flow run 'magnificent-lion' - Created task run 'execute_query-3' for task 'execute_query'
14:43:49.549 | INFO    | Flow run 'magnificent-lion' - Executing 'execute_query-3' immediately...
14:43:50.768 | INFO    | Task run 'execute_query-3' - Finished in state Completed()
14:43:50.965 | INFO    | Flow run 'magnificent-lion' - Created task run 'execute_query-4' for task 'execute_query'
14:43:50.981 | INFO    | Flow run 'magnificent-lion' - Executing 'execute_query-4' immediately...
14:43:54.353 | INFO    | Task run 'execute_query-4' - Finished in state Completed()
14:43:54.594 | INFO    | Flow run 'magnificent-lion' - Created task run 'execute_query-5' for task 'execute_query'
14:43:54.609 | INFO    | Flow run 'magnificent-lion' - Executing 'execute_query-5' immediately...
14:43:58.031 | INFO    | Task run 'execute_query-5' - Finished in state Completed()
```

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PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

14:43:58.211 | INFO    | Flow run 'magnificent-lion' - Created task run 'verify_query_results-0' for task 'verify_query_results'
14:43:58.226 | INFO    | Flow run 'magnificent-lion' - Executing 'verify_query_results-0' immediately...

Verifikasi hasil query Query 1:
Jumlah baris: 10
Kolom: ['regional_name', 'year', 'total_trips']
Sample data:
  regional_name    year  total_trips
0      Berkeley  2017.0        14530
1      Berkeley  2018.0        26089
2    Emeryville  2017.0         3573

Verifikasi hasil query Query 2:
Jumlah baris: 20
Kolom: ['region', 'year', 'average_duration_minutes', 'member_type']
Sample data:
     region    year  average_duration_minutes member_type
0  San Jose  2017.0                     48.40    Customer
1  San Jose  2018.0                     40.36    Customer
2  San Jose  2017.0                     10.76  Subscriber

Verifikasi hasil query Query 3:
Jumlah baris: 10
Kolom: ['start_station_name', 'start_region', 'end_station_name', 'end_region', 'total_trips']
Sample data:
                              start_station_name   start_region  ...     end_region total_trips
0  San Francisco Ferry Building (Harry Bridges Pl...  San Francisco  ...  San Francisco        5543
1                    The Embarcadero at Sansome St  San Francisco  ...  San Francisco        3117
2                              Berry St at 4th St  San Francisco  ...  San Francisco        3034

[3 rows x 5 columns]

Verifikasi hasil query Query 4:
Jumlah baris: 15
Kolom: ['region_name', 'utilization_status', 'total_stations', 'total_trips', 'total_capacity', 'avg_trips_per_bike_per_week', 'percen
tage_of_stations']
Sample data:
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

  region_name utilization_status  total_stations  total_trips  total_capacity  avg_trips_per_bike_per_week  percentage_of_stations
0    Berkeley      Underutilized              15       2430.0           284.0                          2.0                    41.0
1    Berkeley             Ideal              13      11717.0           256.0                         11.0                    35.0
2    Berkeley       Overutilized               9      26472.0           208.0                         29.0                    24.0

Verifikasi hasil query Query 5:
Jumlah baris: 30
Kolom: ['region', 'year', 'total_trips', 'male_trips', 'female_trips', 'age_group']
Sample data:
     region    year  total_trips  male_trips  female_trips          age_group
0  San Jose  2017.0         6127        4945          1182  Middle-aged Adults
1  San Jose  2018.0         5402        4286          1116  Middle-aged Adults
2  San Jose  2017.0          488         317           171       Senior Adults

Verifikasi hasil query Query 6:
Jumlah baris: 10
Kolom: ['region_name', 'year', 'day_of_week', 'hour_of_day', 'total_trips']
Sample data:
  region_name    year day_of_week  hour_of_day  total_trips
0    Berkeley  2017.0    Thursday          1.0          272
1    Berkeley  2018.0   Wednesday          1.0          491
2  Emeryville  2017.0    Thursday          0.0           73
14:43:58.725 | INFO    | Task run 'verify_query_results-0' - Finished in state Completed()
14:43:58.939 | INFO    | Flow run 'magnificent-lion' - Created task run 'upload_to_bigquery-0' for task 'upload_to_bigquery'
14:43:58.955 | INFO    | Flow run 'magnificent-lion' - Executing 'upload_to_bigquery-0' immediately...
14:44:06.649 | INFO    | Task run 'upload_to_bigquery-0' - Finished in state Completed()
Query 1: Loaded 10 rows and 3 columns to my-project-anggita.bikeshare.matrix-1
14:44:06.951 | INFO    | Flow run 'magnificent-lion' - Created task run 'upload_to_bigquery-1' for task 'upload_to_bigquery'
14:44:06.953 | INFO    | Flow run 'magnificent-lion' - Executing 'upload_to_bigquery-1' immediately...
14:44:14.066 | INFO    | Task run 'upload_to_bigquery-1' - Finished in state Completed()
Query 2: Loaded 20 rows and 4 columns to my-project-anggita.bikeshare.matrix-2
14:44:14.289 | INFO    | Flow run 'magnificent-lion' - Created task run 'upload_to_bigquery-2' for task 'upload_to_bigquery'
14:44:14.289 | INFO    | Flow run 'magnificent-lion' - Executing 'upload_to_bigquery-2' immediately...
14:44:17.758 | INFO    | Task run 'upload_to_bigquery-2' - Finished in state Completed()
Query 3: Loaded 10 rows and 5 columns to my-project-anggita.bikeshare.matrix-3
14:44:17.970 | INFO    | Flow run 'magnificent-lion' - Created task run 'upload_to_bigquery-3' for task 'upload_to_bigquery'
14:44:17.970 | INFO    | Flow run 'magnificent-lion' - Executing 'upload_to_bigquery-3' immediately...
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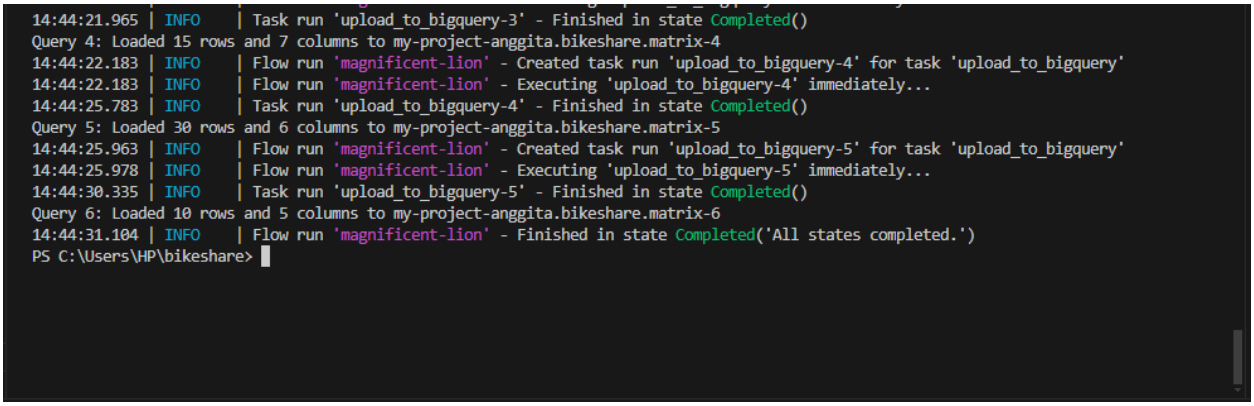
14:44:21.965 | INFO | Task run 'upload_to_bigquery-3' - Finished in state Completed()
Query 4: Loaded 15 rows and 7 columns to my-project-anggita.bikeshare.matrix-4
14:44:22.183 | INFO | Flow run 'magnificent-lion' - Created task run 'upload_to_bigquery-4' for task 'upload_to_bigquery'
14:44:22.183 | INFO | Flow run 'magnificent-lion' - Executing 'upload_to_bigquery-4' immediately...
14:44:25.783 | INFO | Task run 'upload_to_bigquery-4' - Finished in state Completed()
Query 5: Loaded 30 rows and 6 columns to my-project-anggita.bikeshare.matrix-5
14:44:25.963 | INFO | Flow run 'magnificent-lion' - Created task run 'upload_to_bigquery-5' for task 'upload_to_bigquery'
14:44:25.978 | INFO | Flow run 'magnificent-lion' - Executing 'upload_to_bigquery-5' immediately...
14:44:30.335 | INFO | Task run 'upload_to_bigquery-5' - Finished in state Completed()
Query 6: Loaded 10 rows and 5 columns to my-project-anggita.bikeshare.matrix-6
14:44:31.104 | INFO | Flow run 'magnificent-lion' - Finished in state Completed('All states completed.')
PS C:\Users\HP\bikeshare>