

1.

The screenshot shows the pgAdmin 4 interface with the following details:

- Object Explorer:** Shows the database schema with tables like `flights`, `airline`, and `airport`.
- Query Editor:** Contains the following SQL query:

```
SELECT f.* FROM flights f
JOIN airline a ON a.airline_id = f.airline_id
WHERE a.airline_name = 'KMA';
```
- Data Output:** Displays the results of the query, showing 31 rows of flight information. The columns include `flight_id`, `flight_no`, `scheduled_departure_date`, `scheduled_arrival_date`, `departure_airport_id`, `arrival_airport_id`, `departing_gate`, `arriving_gate`, `airline_id`, `status`, and `actual_dep_date`. The results show various flights from airports like NZ-WKO, UZ-SU, AU-NT, CA-NL, SB-WW, US-NY, PO-SAN, US-NC, FR-T, CN-37, AU-QLD, CD-R, US-KS, CD-BN, BT-NAM, EH-U-A, BR-MA, EC-S, and LS-G, all originating from KMA (airline_id 43).
- Message Bar:** A warning message states: "You are currently running version 9.6 of pgAdmin 4, however the current version is 9.9." It also includes a link to "Please click here for more information."

2.

The screenshot shows the pgAdmin 4 interface with the following details:

- Object Explorer:** Shows the database schema with tables like `flights`, `airline`, and `airport`.
- Query Editor:** Contains the following SQL query:

```
SELECT f.flight_id,
       f.flight_no,
       a.airport_name AS departure_airport
FROM flights f
JOIN airport a ON f.departure_airport_id = a.airport_id;
```
- Data Output:** Displays the results of the query, showing 1000 rows of flight information. The columns include `flight_id`, `flight_no`, and `departure_airport`. The results show flights from various airports such as Elorza Airport, Figari Sud-Corse Airport, Darchula Airport, Lime Acres Finsch Mine Airport, Hana Airport, Darchula Airport, Ocean Falls Seaplane Base, Figari Sud-Corse Airport, Hana Airport, Longana Airport, Delta County Airport, Elorza Airport, Figari Sud-Corse Airport, Darchula Airport, Akunay Heliport, Zephyrhills Municipal Airport, Figari Sud-Corse Airport, Fort Worth Alliance Airport, Fort Worth Alliance Airport, and Henri Coanda International Airport.
- Message Bar:** A warning message states: "You are currently running version 9.6 of pgAdmin 4, however the current version is 9.9." It also includes a link to "Please click here for more information."

3.

Object Explorer

```

> Triggers
  booking_flight
    > Columns(5)
      booking_flight_id
      booking_id
      flight_id
      created_at
      update_at
    > Constraints
    > Indexes
    > RLS Policies
    > Rules
    > Triggers
  flights
    > Columns(14)
      flight_id
      flight_no
      scheduled_departure
      scheduled_arrival
      departure_airport_id
      arrival_airport_id
      departing_gate
      arriving_gate
      airline_id
      status
      actual_departure
      actual_arrival
      created_at
      update_at
    > Constraints
    > Indexes
    > RLS Policies
    > Rules
    > Triggers
  passengers
    > Columns(10)
      passenger_id
      first_name
      last_name
      date_of_birth
      gender
    > Constraints
    > Indexes
    > RLS Policies
    > Rules
    > Triggers
  country_of_citizenship

```

Query Query History

```

5693
5694 --3
5695 SELECT a.airline_id, a.airline_name
5696 FROM airline a
5697 LEFT JOIN flights f ON a.airline_id = f.airline_id
5698 AND f.scheduled_departure >= date_trunc('month', CURRENT_DATE + interval '1 month')
5699 WHERE f.flight_id IS NULL;
5700
5701
5702
5703
5704
5705
5706
5707
5708
5709
5710
5711
5712
5713
5714
5715
5716
5717
5718
5719
5720
5721
5722
5723
5724
5725

```

Data Output Messages Notifications

airline_id	airline_name
1	20 SSL
2	25 CLY
3	26 YHB
4	27 KKL
5	11 IVA
6	39 GYA
7	17 YLP
8	33 BLD
9	31 YEK
10	34 SMM
11	12 KOQ
12	10 SOZ

Total rows: 50 | Query complete 00:00:00.078 | CRLF | Ln 5625, Col 1

4.

Object Explorer

```

> Constraints
> Indexes
> RLS Policies
> Rules
> Triggers
> airport
> baggage
> baggage_check
> boarding_pass
> booking
  > Columns(8)
    booking_id
    passenger_id
    booking_platform
    created_at
    status
    price
    ticket_discount
  > Constraints
  > Indexes
  > RLS Policies
  > Rules
  > Triggers
  booking_flight
    > Columns(5)
      booking_flight_id
      booking_id
      flight_id
      created_at
      update_at
  > Constraints
  > Indexes
  > RLS Policies
  > Rules
  > Triggers
  flights
    > Columns(14)
      flight_id
      flight_no

```

Query Query History

```

5696 select * from flights
5697
5698
5699 --4
5700
5701
5702
5703
5704
5705
5706
5707
5708
5709
5710
5711
5712
5713
5714
5715
5716
5717

```

Data Output Messages Notifications

passenger_id	first_name	last_name	date_of_birth	gender	country_of_citizenship	country_of_residence	passport_number	created_at	update_at
--------------	------------	-----------	---------------	--------	------------------------	----------------------	-----------------	------------	-----------

You are currently running version 9.6 of pgAdmin 4, however the current version is 9.9.

Please click [here](#) for more information.

Total rows: 0 | Query complete 00:00:00.100 | CRLF | Ln 5615, Col 1

5.

6.

```

airport_2/postgres@PostgreSQL 17
--5
SELECT f.flight_no ,
       AVG(price) AS average_price,
       SUM(b.price) AS sum_of_price,
       MAX(b.price) AS max_price,
       MIN(b.price) AS min_price
  FROM booking b
 JOIN booking_flight bf ON b.booking_id = bf.booking_id
 JOIN flights f ON bf.flight_id = f.flight_no
 GROUP BY f.flight_no;

```

The screenshot shows the pgAdmin 4 interface with the Object Explorer on the left and the Query tool on the right. The query window displays the SQL code above, which calculates various statistics for each flight number. The results are shown in a table below:

	flight_no	average_price	sum_of_price	max_price	min_price
1	FR-O	743.57	743.57	743.57	
2	ZA-NL	3448.9050000000000000	6897.81	4871.92	2025.89
3	AF-FRA	7638.5500000000000000	7638.55	7638.55	
4	CH-NE	3239.0150000000000000	6478.03	4626.45	1851.58
5	HR-18	1682.5100000000000000	1682.51	1682.51	1682.51
6	US-NV	5642.3700000000000000	5642.37	5642.37	5642.37
7	CA-AB	4395.2333333333333333	13185.70	5203.21	2779.28
8	BR-PA	1676.7100000000000000	1676.71	1676.71	1676.71
9	UA-32	2357.8550000000000000	4715.71	3194.55	1521.16
10	RU-SAK	1431.2750000000000000	5725.10	2333.07	127.04
11	AU-WA	4330.8560000000000000	43308.56	7596.90	743.57
12	VU-SEE	2494.1500000000000000	2494.15	2494.15	
13	BR-GO	3098.0000000000000000	3098.00	3098.00	3098.00
14	UA-46	2990.9100000000000000	5981.82	5545.62	436.20
15	RU-YAN	6955.1500000000000000	6955.15	6955.15	
16	AZ-BA	5899.2800000000000000	11798.56	8217.56	3581.00
17	IN-WB	3330.0500000000000000	6660.10	4252.91	2407.19
18	DZ-33	7460.7600000000000000	7460.76	7460.76	7460.76
19	AF-GHA	4099.2000000000000000	4099.20	4099.20	4099.20
20	DE-SH	3585.0800000000000000	7170.16	6564.75	605.41
21	GB-NIR	4157.3300000000000000	4157.33	4157.33	4157.33

Total rows: 384 Query complete 00:00:10.4

6.

7.

```

airport_2/postgres@PostgreSQL 17
--6
SELECT f.flight_no , a.airline_name, ar.airport_name, ar.country
  FROM flights f
 JOIN airline a ON f.airline_id = a.airline_id
 JOIN airport ar ON f.arrival_airport_id = ar.airport_id
 WHERE ar.country like '%SA'

```

The screenshot shows the pgAdmin 4 interface with the Object Explorer on the left and the Query tool on the right. The query window displays the SQL code above, which selects flight numbers, airline names, arrival airport names, and countries where the arrival airport is in Saudi Arabia. A green success message at the bottom indicates the query was run successfully.

✓ Successfully run. Total query runtime: 78 msec. 0 rows affected. ✘

You are currently running version 9.6 of pgAdmin 4, however the current version is 9.9.
Please click here for more information.

Object Explorer Query History Scratch Pad

```

JOIN airport ar ON f.arrival_airport_id = ar.airport_id
WHERE ar.country like '%A'

SELECT p.first_name, p.last_name,
p.date_of_birth, ar.airport_name
AS arrival_airport,
ar.country AS arrival_country,
f.actual_arrival
FROM passengers p
JOIN booking b ON p.passenger_id = b.passenger_id
JOIN booking_flight bf ON b.booking_id = bf.booking_id
JOIN flights f ON bf.flight_id = f.flight_id
JOIN airport ar ON f.arrival_airport_id = ar.airport_id
WHERE AGE(CURRENT_DATE,p.date_of_birth) < INTERVAL '18 years';

```

Data Output Messages Notifications

first_name	last_name	date_of_birth	arrival_airport	arrival_country	actual_arrival

Total rows: 0 Query complete 00:00:00.082

You are currently running version 9.6 of pgAdmin 4, however the current version is 9.9.

Please click [here](#) for more information.

CRLF Ln 5642, Col 18

8.

pgAdmin 4 Object Explorer Query History Scratch Pad

```

FROM passengers p
JOIN booking b ON p.passenger_id = b.passenger_id
JOIN booking_flight bf ON b.booking_id = bf.booking_id
JOIN flights f ON bf.flight_id = f.flight_id
JOIN airport ar ON f.arrival_airport_id = ar.airport_id
WHERE AGE(CURRENT_DATE,p.date_of_birth) < INTERVAL '18 years';

--8

SELECT p.first_name ||' '|| p.last_name AS full_name,
p.passport_number,
ar.country,
f.actual_arrival
FROM passengers p
JOIN booking b ON p.passenger_id = b.passenger_id
JOIN booking_flight bf ON b.booking_id = bf.booking_id
JOIN flights f ON bf.flight_id = f.flight_id
JOIN airport ar ON f.arrival_airport_id = ar.airport_id

```

Data Output Messages Notifications

full_name	passport_number	country	actual_arrival
Muhammad Fass	109932770-9	Poland	2023-07-18
Trevor Broun	788025864-7	Indonesia	2024-02-11
Auria Breffit	570537241-4	China	2023-07-11
Archie Torrel	677556708-1	Indonesia	2023-06-17
Sanders Biddle	514546405-3	Indonesia	2023-09-05
Sanders Biddle	514546405-3	China	2024-03-01
Remington Piggot	470074456-1	Tanzania	2023-05-31
Glynis Marie	209933120-0	Russia	2024-02-02
Cesario McConic	364900190-X	China	2023-04-03
Con Borrel	837895465-3	Philippines	2024-02-15
Lorianna Robbie	493554132-3	Tanzania	2024-01-19
Brad Apperley	842288763-0	China	2024-02-10

Showing rows: 1 to 1000 Page No: 1 of 1

Total rows: 1000 Query complete 00:00:00.091

CRLF Ln 5662, Col 1

9.

File Object Tools Edit View Window Help

Object Explorer Scratch Pad

```

--> Schemas(1)
    > public
        > Aggregates
        > Collations
        > Domains
        > FTS Configurations
        > FTS Dictionaries
        > FTS Parsers
        > FTS Templates
        > Foreign Tables
        > Functions
        > Materialized Views
        > Operators
        > Procedures
        > Sequences
    > Tables(10)
        > airline
            > Columns(6)
                airline_id
                airline_code
                airline_name
                airline_country
                created_at
                update_at
            > Constraints
            > Indexes
            > RLS Policies
            > Rules
            > Triggers
        > airport
            > Columns(7)
                airport_id
                airport_name
                country
                state
                city
                created_at

```

Query History

```

5660
5661 --9
5662 SELECT f.flight_no,
5663 a.airline_name,
5664 ar.country AS origin_country
5665 FROM flights f
5666 JOIN airline a ON f.airline_id = a.airline_id
5667 JOIN airport ar ON f.departure_airport_id = ar.airport_id
5668 WHERE a.airline_country = ar.country
5669 GROUP BY ar.country, f.flight_no, a.airline_name
5670
5671
5672
5673
5674
5675
5676
5677
5678
5679
5680
5681
5682

```

Data Output Messages Notifications

	flight_no	airline_name	origin_country
1	ID-PA	YHB	China
2	EE-39	KOQ	Russia
3	VN-35	SSL	China
4	PG-SAN	KLE	Slovenia
5	CA-BC	GYA	China
6	US-NE	GYA	China
7	BR-MG	YHB	China
8	TZ-24	YEK	China
9	SE-AC	KUQ	China
10	US-AK	SOZ	Indonesia
11	GL-U-A	XLU	China
12	ID-MU	KUQ	China

Showing rows: 1 to 73 | Page No: 1 of 1 | 14 | <>