

1. Write a query that displays all flights of a specific airline.

The screenshot shows the pgAdmin 4 interface. In the top-left corner, it says "Welcome lab6/postgres@PostgreSQL 17*". Below that is a toolbar with various icons. The main area has a "Query" tab open, showing the following SQL code:

```
1 ✓ select f.*  
2   from flights as f join airline as a  
3     on a.airline_id = f.airline_id  
4   where a.airline_name = 'KLE';  
5
```

Below the code is a "Data Output" section containing a table with 15 rows of flight information. The columns include flight_id, flight_no, scheduled_departure, scheduled_arrival, departure_airport_id, arrival_airport_id, departing_gate, arriving_gate, airline_id, status, actual_departure, and act. The last row shows a total of 15 rows.

At the bottom of the pgAdmin window, it says "Total rows: 15 Query complete 00:00:00.231". The system tray at the bottom of the screen shows the date and time as 04.11.2025.

2. Compose a query to obtain a list of all flights with the names of departure airports.

The screenshot shows the pgAdmin 4 interface again. The top-left corner says "Welcome lab6/postgres@PostgreSQL 17*". The main area has a "Query" tab open with the following SQL code:

```
1 ✓ select f.flight_no , ap.airport_name  
2   from flights as f join airport as ap  
3     on f.departure_airport_id = ap.airport_id
```

Below the code is a "Data Output" section containing a table with 1000 rows of flight and airport information. The columns include flight_no and airport_name. The last row shows a total of 1000 rows.

At the bottom of the pgAdmin window, it says "Total rows: 1000 Query complete 00:00:00.105". The system tray at the bottom of the screen shows the date and time as 04.11.2025.

3. Create a query that finds all airlines that have no flights scheduled for the next month.

```
pgAdmin 4
File Object Tools Edit View Window Help
Welcome lab6/postgres@PostgreSQL 17*
lab6/postgres@PostgreSQL 17
Query History
Scratch Pad
1 select a.*  
2 from airline as a  
3 left join flights as f  
4 on a.airline_id = f.flight_id  
5 AND f.scheduled_departure >= '2025-11-01'  
6 AND f.scheduled_departure < '2025-12-01'  
7 where f.airline_id is null;  
8  
9  
10
```

Data Output Messages Notifications

| airline_id [PK] integer | airline_code character varying (50) | airline_name character varying (50) | airline_country character varying (50) | created_at date | update_at date |
|-------------------------|-------------------------------------|-------------------------------------|--|-----------------|----------------|
| 1 | 1 SCIP | IPC | Russia | 2023-12-02 | 2023-09-18 |
| 2 | 2 YPDA | PDN | Brazil | 2024-01-15 | 2023-11-23 |
| 3 | 3 FKKH | KLE | Slovenia | 2023-12-16 | 2023-05-23 |
| 4 | 4 OOKB | KHS | France | 2023-11-18 | 2024-02-18 |
| 5 | 5 CYLQ | YLO | Kazakhstan | 2023-03-23 | 2023-07-26 |
| 6 | 6 FANG | NGL | Panama | 2023-11-27 | 2024-02-03 |
| 7 | 7 SSZS | O | Iran | 2023-11-02 | 2024-01-16 |
| 8 | 8 SNIG | OIG | Greece | 2023-12-07 | 2023-08-01 |

Showing rows: 1 to 50 | Page No: 1 of 1 | << << >> >>

Total rows: 50 Query complete 00:00:00.176 CRLF Ln 10, Col 1

2 cm of snow Wednesday 17:44 ENG 04.11.2025

4. Create a query to display a list of passengers on a specific flight

```
pgAdmin 4
File Object Tools Edit View Window Help
Welcome lab6/postgres@PostgreSQL 17*
lab6/postgres@PostgreSQL 17
Query History
Scratch Pad
1 select p.last_name , p.first_name  
2 from passengers as p  
3 join flights as f  
4 on p.passenger_id = f.flight_id  
5 where flight_no = 'SL-N';  
6  
7
```

Data Output Messages Notifications

| last_name character varying (50) | first_name character varying (50) |
|----------------------------------|-----------------------------------|
| Toffel | Archie |

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

Total rows: 1 Query complete 00:00:00.156 CRLF Ln 7, Col 1

Rain and snow ... Tomorrow 17:55 ENG 04.11.2025

5. Write a query that calculates the average, total, maximum and minimum price of tickets for each flight.

```

1 v select flight_id ,avg(price) as avg_price , sum(price) as total_price, min(price) as min_price , max(price) as max_price
2   from booking as b join flights as f
3     on b.booking_id = f.flight_id
4   group by flight_id
5
6

```

The screenshot shows the pgAdmin 4 interface with a SQL query window containing the provided code. Below the query, the results are displayed in a table:

| | flight_id | avg_price | total_price | min_price | max_price |
|---|-----------|-----------|-------------|-----------|-----------|
| 1 | 184 | 2614.11 | 2614.11 | 2614.11 | 2614.11 |
| 2 | 87 | 5384.53 | 5384.53 | 5384.53 | 5384.53 |
| 3 | 477 | 8985.71 | 8985.71 | 8985.71 | 8985.71 |
| 4 | 273 | 2314.39 | 2314.39 | 2314.39 | 2314.39 |
| 5 | 394 | 9293.16 | 9293.16 | 9293.16 | 9293.16 |
| 6 | 51 | 9082.79 | 9082.79 | 9082.79 | 9082.79 |
| 7 | 272 | 9455.29 | 9455.29 | 9455.29 | 9455.29 |
| 8 | 70 | 4500.88 | 4500.88 | 4500.88 | 4500.88 |

Total rows: 500 Query complete 00:00:00.148

6. Create a query that shows all flights flying to a specific country by combining flights, airports and airline, and using the condition on the country name

```

1 v select f.flight_no, a.airline_name, ap.airport_name, ap.country
2   from flights as f
3
4   JOIN airline AS a
5     ON f.airline_id = a.airline_id
6   JOIN airport AS ap
7     ON f.departure_airport_id = ap.airport_id
8
9 where a.airline_country= 'Kazakhstan';
10

```

The screenshot shows the pgAdmin 4 interface with a SQL query window containing the provided code. Below the query, the results are displayed in a table:

| | flight_no | airline_name | airport_name | country |
|---|-----------|--------------|------------------------------------|-----------|
| 1 | US-IL | YLO | Garbaharey Airport | Indonesia |
| 2 | PK-BA | YLO | Tom Price Airport | Indonesia |
| 3 | MX-BCN | YLO | Armidale Airport | Tanzania |
| 4 | KI-G | YLO | Fort Worth Alliance Airport | Poland |
| 5 | MH-NMU | YLO | Armidale Airport | Tanzania |
| 6 | CR-SJ | YLO | Tom Price Airport | Indonesia |
| 7 | US-FL | YLO | Henri Coandă International Airport | Indonesia |
| 8 | BR-MS | YLO | Bermuda Dunes Airport | China |

Total rows: 10 Query complete 00:00:00.120

7. Display a list of minor passengers and their arrival destination.

The screenshot shows the pgAdmin 4 interface. In the top-left, the title bar says "pgAdmin 4" and "Welcome lab6/postgres@PostgreSQL 17*". The main area has a "Query" tab open with the following SQL code:

```
1 select p.first_name , p.last_name , f.actual_arrival , date_part('year' , age(current_date , p.date_of_birth)) as year
2 from passengers as p join flights as f
3 on p.passenger_id = f.flight_id
4 where date_part('year' , age(current_date , p.date_of_birth)) < 18;
5
```

Below the code, the "Data Output" tab is selected, displaying the results of the query:

| | first_name | last_name | actual_arrival | year |
|---|------------|-----------|----------------|------|
| 1 | Artur | Leap | 2023-03-24 | 17 |
| 2 | Gwennie | Chinnery | 2024-02-21 | 17 |
| 3 | Cleve | Edgeler | 2023-10-05 | 16 |
| 4 | Bernie | Michal | 2023-12-01 | 16 |
| 5 | Lester | Blades | 2023-11-10 | 17 |
| 6 | Bradley | Grolle | 2023-12-09 | 17 |
| 7 | Vivyan | Mallabone | 2023-07-08 | 16 |
| 8 | Ynez | Bortoloni | 2023-04-21 | 16 |

Total rows: 9 Query complete 00:00:00.103

8. Display the passenger's full name, passport number, and the passenger's current time of arrival at the destination.

The screenshot shows the pgAdmin 4 interface. In the top-left, the title bar says "pgAdmin 4" and "Welcome lab6/postgres@PostgreSQL 17*". The main area has a "Query" tab open with the following SQL code:

```
1 SELECT
2     p.first_name,
3     p.last_name,
4     p.passport_number,
5     f.actual_arrival
6 FROM passengers AS p
7 JOIN booking AS b
8     ON p.passenger_id = b.passenger_id
9 JOIN booking_flight AS bf
10    ON b.booking_id = bf.booking_id
11 JOIN flights AS f
12    ON bf.flight_id = f.flight_id;
```

Below the code, the "Data Output" tab is selected, displaying the results of the query:

| | first_name | last_name | passport_number | actual_arrival |
|---|------------|-----------|-----------------|----------------|
| 1 | Muhammad | Fass | 109932770-9 | 2023-07-18 |
| 2 | Trevor | Broun | 788025864-7 | 2024-02-11 |
| 3 | Auria | Breffit | 570537341-4 | 2023-07-11 |
| 4 | Archie | Toffel | 677556708-1 | 2023-06-17 |
| 5 | Sanders | Biddles | 514546405-3 | 2023-09-05 |
| 6 | Sanders | Biddles | 514546405-3 | 2024-03-01 |
| 7 | Remington | Piggot | 470074456-1 | 2023-05-31 |
| 8 | Glynis | Marle | 209933120-0 | 2024-02-02 |

Total rows: 1000 Query complete 00:00:00.162

9. Print a list of flights where the airline's home country and origin country are the same.
Group them by the airport country

The screenshot shows the pgAdmin 4 interface. In the top-left, the title bar says "pgAdmin 4" and "Welcome lab6/postgres@PostgreSQL 17*". Below it, the connection status is "lab6/postgres@PostgreSQL 17". The main area has tabs for "Query" and "Query History". A large code editor window contains the following SQL query:

```
1 SELECT
2     ap.country AS airport_country,
3     COUNT(*) AS flights_cnt
4 FROM flights AS f
5 JOIN airline AS a
6     ON f.airline_id = a.airline_id
7 JOIN airport AS ap
8     ON f.departure_airport_id = ap.airport_id
9 WHERE a.airline_country = ap.country
10 GROUP BY ap.country;
11
```

Below the code editor is a "Data Output" tab, which displays the results of the query in a table:

| airport_country | flights_cnt |
|-----------------|-------------|
| Indonesia | 6 |
| Slovenia | 2 |
| Greece | 1 |
| Russia | 5 |
| China | 50 |
| Brazil | 5 |
| Poland | 2 |
| Philippines | 3 |

At the bottom of the pgAdmin window, there is a status bar with the message "Successfully run. Total query runtime: 113 msec. 8 rows affected." and other system information like "Total rows: 8" and "Query complete 00:00:00.113".