

LAB 3

1. Select all the data of passengers whose last name is same as first name.

The screenshot shows a PostgreSQL database interface. In the top right, there's a 'console_4 [postgres@localhost [2]]' tab. Below it, the 'Output' tab displays the result of the query: 'SELECT * FROM passengers WHERE last_name = first_name;'. The output area shows '0 rows'.

```
SELECT * FROM passengers WHERE last_name = first_name;
```

The screenshot shows a PostgreSQL database interface. In the top right, there's a 'console_4 [postgres@localhost [2]]' tab. Below it, the 'Output' tab displays the result of the query: 'SELECT * FROM passengers WHERE last_name = first_name;'. The output area shows several error messages related to a booking table:

```
[2025-09-30 18:08:38] Connected to airport_bd
[2025-09-30 18:08:38] airport_bd> INSERT INTO booking (booking_id, flight_id, passenger_id, booking_platform, (1, 5, 12, 'Website', NOW(), NOW(), 'Confirmed', 350.50)
[2025-09-30 18:08:38] [23505] ERROR: duplicate key value violates unique constraint "booking_pkey"
[2025-09-30 18:08:38] Подробности: Key (booking_id)=(1) already exists.
[2025-09-30 18:09:34] airport_bd.public> SELECT * FROM passengers WHERE last_name = first_name
[2025-09-30 18:09:35] 0 rows retrieved in 496 ms (execution: 16 ms, fetching: 480 ms)
```

```
SELECT * FROM passengers WHERE last_name = first_name;
```

2. Select the last name of all passengers without duplicates.

The screenshot shows a PostgreSQL database interface with a dark theme. In the top right, there's a tab labeled "console_4 [postgres@localhost [2]]". Below it, the "Database Explorer" sidebar lists several schemas and tables under "postgres@localhost [2]". The main area contains a code editor with the following SQL query:

```
1 ✓ SELECT DISTINCT last_name FROM passengers;
```

Below the code editor is the "Database Sessions" panel, which shows a single session named "console_4" with a duration of 384 ms. To the right is the "Output" panel, titled "airport_bd.public.passengers", which displays a list of last names:

last_name
Jackson
Powell
Harris
Stewart
Simmons
Bennett
Thomas
Griffin
Wright

At the bottom of the interface, there are status indicators: "2:1 LF UTF-8 4 spaces" and a "Copy" button.

This screenshot is identical to the one above, showing the same PostgreSQL interface. The "Database Explorer" sidebar, the "Database Sessions" panel, and the "Output" panel displaying the list of last names are all present. The list of last names is identical to the one in the first screenshot:

last_name
Jackson
Powell
Harris
Stewart
Simmons
Bennett
Thomas
Griffin
Wright

The screenshot displays two database sessions in a PostgreSQL interface. Both sessions are connected to the `postgres@localhost [2]` database.

Session 1 (Top):

- Output tab: `airport_bd.public.passengers`
- Table: `last_name`
- Data:

22	Hill
23	Perez
24	Washington
25	Campbell
26	Long
27	Sanchez
28	Johnson
29	Perry
30	Bailey
31	Murphy
32	Edwards
33	Jones
34	Richardson
35	Moore
36	Lopez
37	Cooper
38	Lee
39	Cox
40	Evans
41	Rogers
42	Scott

Session 2 (Bottom):

- Output tab: `airport_bd.public.passengers`
- Table: `last_name`
- Data:

42	Scott
43	Allen
44	Nguyen
45	Kelly
46	Parker
47	James
48	Foster
49	Hughes
50	Howard
51	Carter
52	Robinson
53	Butler
54	Green
55	Nelson
56	Morgan
57	Hall
58	Ward
59	Smith
60	Bell
61	Fisher
62	Jenkins

The screenshot shows a PostgreSQL database interface with two panes. The left pane, 'Database Sessions', lists a single session: 'console_4 [postgres@localhost [2]]'. The right pane, 'Output', displays the results of a query on the 'passengers' table from the 'airport_bd.public' schema. The results are sorted by 'last_name'. The output shows 83 rows of data, with the last few rows being: Clark, Peterson, White, Cole, Alexander, Hernandez, Cook, Sanders, Baker, Torres, Phillips, Williams, Garcia, Rivera, Hayes, Roberts, Lewis, Young, Gray, Diaz, and Turner.

last_name
Clark
Peterson
White
Cole
Alexander
Hernandez
Cook
Sanders
Baker
Torres
Phillips
Williams
Garcia
Rivera
Hayes
Roberts
Lewis
Young
Gray
Diaz
Turner

This screenshot is identical to the one above, showing the same database interface and results for the 'passengers' table. It displays 83 rows of data, starting with Clark and ending with Turner.

last_name
Clark
Peterson
White
Cole
Alexander
Hernandez
Cook
Sanders
Baker
Torres
Phillips
Williams
Garcia
Rivera
Hayes
Roberts
Lewis
Young
Gray
Diaz
Turner

```
SELECT DISTINCT last_name FROM passengers;
```

3. Find all male passengers born between 1990 and 2000.

The screenshot shows a PostgreSQL database interface with the following details:

- Database Explorer:** Shows the schema structure under the `postgres@localhost [2]` connection, including tables like `baggage_check`, `boarding_pass`, `booking`, and `booking_flight`.
- Playground:** A query editor window titled `console_4 [postgres@localhost [2]]` containing the SQL query:

```
1 ✓ SELECT * FROM passengers WHERE gender ILIKE 'male' AND date_of_birth BETWEEN '1990-01-01' AND '2000-12-31';
```
- Output:** An output window titled `airport_bd.public.passengers` showing the results of the query. The results table has columns: `passenger_id`, `first_name`, `last_name`, `date_of_birth`, `gender`, and `country_of_citizenship`. It displays 0 rows.
- Database Sessions:** Shows a single session named `console_4` with a duration of 350 ms.

```
SELECT * FROM passengers WHERE gender ILIKE 'male' AND date_of_birth  
BETWEEN '1990-01-01' AND '2000-12-31';
```

4. Find price of tickets sold for each month in sorted way.

The screenshot shows a PostgreSQL database interface with the following details:

- Database Explorer:** Shows the schema structure under the `postgres@localhost [2]` connection, including the `airport_bd` database which contains the `schemas` and `tables` sections.
- Playground:** A query editor window titled `console_4 [postgres@localhost [2]]` containing the SQL query:

```
1 ✓ SELECT DATE_TRUNC('month', created_at) AS month, SUM(ticket_price) AS total_sales  
FROM booking GROUP BY month ORDER BY month;
```
- Output:** An output window titled `Result 14` showing the results of the query. The results table has columns: `month` and `total_sales`. It displays 1 row: `2025-09-01 00:00:00.000000` with a value of `10284`.
- Database Sessions:** Shows a single session named `console_4` with a duration of 339 ms.

```
SELECT DATE_TRUNC('month', created_at) AS month, SUM(ticket_price) AS total_sales
FROM booking GROUP BY month ORDER BY month;
```

5. Create a query that shows all flights flying to 'China'.

The screenshot shows a PostgreSQL database interface with the following details:

- Database Explorer:** Shows the connection to `postgres@localhost [2]` and the schema `public`.
- Playground:** Contains the query:

```
1 ✓ SELECT f.* FROM flights f JOIN airport a ON f.arriving_airport_id = a.airport_id
WHERE a.country ILIKE 'China';
```
- Output:** Shows the results of the query, listing 10 rows of flight information. The columns are: flight_id, sch_departure_time, sch_arrival_time, departing_airport_id, arriving_airport_id, and arrival_time.

flight_id	sch_departure_time	sch_arrival_time	departing_airport_id	arriving_airport_id	arrival_time
13	2025-09-01 20:00:00.000000	2025-09-01 22:30:00.000000		6	
32	2025-09-03 06:45:00.000000	2025-09-03 09:15:00.000000		5	
46	2025-09-03 17:15:00.000000	2025-09-03 19:45:00.000000		5	
64	2025-09-04 14:15:00.000000	2025-09-04 16:45:00.000000		19	
84	2025-09-05 12:45:00.000000	2025-09-05 15:15:00.000000		19	
104	2025-09-06 11:15:00.000000	2025-09-06 13:45:00.000000		19	
124	2025-09-07 09:45:00.000000	2025-09-07 12:15:00.000000		19	
144	2025-09-08 08:15:00.000000	2025-09-08 10:45:00.000000		19	
164	2025-09-09 06:45:00.000000	2025-09-09 09:15:00.000000		19	
184	2025-09-09 21:45:00.000000	2025-09-10 00:15:00.000000		19	

```
SELECT f.* FROM flights f JOIN airport a ON f.arriving_airport_id =
a.airport_id
WHERE a.country ILIKE 'China';
```

6. Show airlines from any of: ('France','Portugal','Poland') created between '2023-11-01' and '2024-03-31'.

```
SELECT * FROM airline WHERE airline_country IN
('France', 'Portugal', 'Poland')
AND created_at::date BETWEEN '2023-11-01' AND '2024-03-31';
```

The screenshot shows a PostgreSQL database interface. In the Database Explorer, there is one database session named 'postgres@localhost [2]'. Under this session, there is a 'public' schema containing a 'airline' table. The 'airline' table has six columns: 'airline_id' (integer), 'airline_code' (varchar), 'airline_name' (varchar), and 'airline_country' (varchar). A query is being run in the main console window:

```
1 ✓ SELECT * FROM airline WHERE airline_country IN ('France','Portugal','Poland')  
2 AND created_at::date BETWEEN '2023-11-01' AND '2024-03-31';
```

The output pane shows the results of the query.

7. Find all airline names based in Kazakhstan.

The screenshot shows a PostgreSQL database interface. In the Database Explorer, there is one database session named 'postgres@localhost [2]'. Under this session, there is a 'public' schema containing a 'airline' table. A query is being run in the main console window:

```
1 ✓ SELECT airline_name FROM airline WHERE airline_country ILIKE 'Kazakhstan';
```

The output pane shows the results of the query.

```
SELECT airline_name FROM airline WHERE airline_country ILIKE 'Kazakhstan';
```

8. Reduce the cost of booking price by 10% created before '11-01-2023'.

The screenshot shows a PostgreSQL database interface with the following details:

- Database Explorer:** Shows the schema with tables: `airline`, `airport`, and `baggage`.
- Console:** Displays the command:


```
UPDATE booking SET ticket_price = ROUND(ticket_price * 0.9) WHERE created_at::date < '2023-11-01';
```
- Database Sessions:** Shows a session for `postgres@localhost [2]` named `console_4` which took 339 ms.
- Logs:** Shows a history of database activity from 2025-09-30, including multiple SELECT and UPDATE statements on the `airline` and `booking` tables.
- Bottom Bar:** Includes settings for 2:1 LF, UTF-8, 4 spaces, and a refresh icon.

```
UPDATE booking SET ticket_price = ROUND(ticket_price * 0.9) WHERE
created_at::date < '2023-11-01';
```

9. Find top3 overweighted baggage with more than 25kg.

The screenshot shows a PostgreSQL database interface with the following details:

- Database Explorer:** Shows the schema with tables: `airline`, `airport`, and `baggage`.
- Console:** Displays the command:


```
SELECT * FROM baggage WHERE weight_in_kg > 25 ORDER BY weight_in_kg DESC LIMIT 3;
```
- Output:** Shows the results of the query in a table format:

	baggage_id	weight_in_kg	created_at	updated_at	booking_id
1	46	38.25	2025-09-30 14:14:46.188396	2025-09-30 14:14:46.188396	
2	58	37.60	2025-09-30 14:14:46.188396	2025-09-30 14:14:46.188396	
3	118	37.50	2025-09-30 14:14:46.213047	2025-09-30 14:14:46.213047	
- Bottom Bar:** Includes settings for 1:68 LF, UTF-8, 4 spaces, and a refresh icon.

```
SELECT * FROM baggage WHERE weight_in_kg > 25 ORDER BY weight_in_kg DESC
LIMIT 3;
```

10. Find the youngest passengers' full name.

The screenshot shows a PostgreSQL database interface. In the top right, there is a code editor window titled "console_4 [postgres@localhost [2]]". It contains the following SQL query:

```
SELECT first_name || ' ' || last_name AS full_name, date_of_birth FROM passengers
ORDER BY date_of_birth DESC LIMIT 1;
```

Below the code editor is a results table titled "Result 31". It has two columns: "full_name" and "date_of_birth". The single row returned is:

full_name	date_of_birth
Mia Gonzalez	1996-05-11

At the bottom of the interface, the status bar shows "Database Consoles > postgres@localhost [2] > console_4 [postgres@localhost [2]]".

```
SELECT first_name || ' ' || last_name AS full_name, date_of_birth FROM
passengers
ORDER BY date_of_birth DESC LIMIT 1;
```

11. Find the cheapest booking price on each booking platform.

The screenshot shows a PostgreSQL database interface. In the top right, there is a code editor window titled "console_4 [postgres@localhost [2]]". It contains the following SQL query:

```
SELECT booking_platform, MIN(ticket_price) AS cheapest_price FROM booking
GROUP BY booking_platform;
```

Below the code editor is a results table titled "Result 33". It has two columns: "booking_platform" and "cheapest_price". The three rows returned are:

booking_platform	cheapest_price
Travel Agency	470.25
Mobile App	298
Website	150

At the bottom of the interface, the status bar shows "Database Consoles > postgres@localhost [2] > console_4 [postgres@localhost [2]]".

```
SELECT booking_platform, MIN(ticket_price) AS cheapest_price FROM booking
GROUP BY booking_platform;
```

12. Return airlines whose airline_code contains a digit.

```
SELECT * FROM airline WHERE airline_code ~ '[0-9]';
```

The screenshot shows a PostgreSQL database interface with two panes. The left pane is the Database Explorer, displaying the schema of the 'airline' table with columns: airline_id, airline_code, airline_name, airline_country, created_at, and updated_at. The right pane is the console, showing the results of the query:

```
SELECT * FROM airline WHERE airline_code ~ '[0-9]';
```

	airline_id	airline_code	airline_name	airline_country	created_at
1	AA12	American Airlines	USA	2018-01-05 12:34:21.000000	
2	BA23	British Airways	UK	2019-03-12 09:11:45.000000	

The second part of the screenshot shows the full list of airlines from the 'airline' table:

	airline_id	airline_code	airline_name	airline_country	created_at	updated_at
1	AA12	American Airlines	USA	2018-01-05 12:34:21.000000	2018-01-05 16:12:33	
2	BA23	British Airways	UK	2019-03-12 09:11:45.000000	2019-03-12 12:45:22	
3	LH34	Lufthansa	Germany	2020-06-18 23:45:12.000000	2020-06-19 01:22:44	
4	AF45	Air France	France	2021-07-20 05:30:55.000000	2021-07-20 08:15:33	
5	EK56	Emirates	UAE	2022-08-10 14:12:01.000000	2022-08-10 18:00:45	
6	QR67	Qatar Airways	Qatar	2018-02-15 19:22:33.000000	2018-02-15 22:11:10	
7	SQ78	Singapore Airlines	Singapore	2019-04-07 06:45:12.000000	2019-04-07 09:55:33	
8	CX89	Cathay Pacific	Hong Kong	2020-05-20 20:11:45.000000	2020-05-21 01:33:21	
9	JL91	Japan Airlines	Japan	2021-03-03 03:12:34.000000	2021-03-03 06:44:11	
10	AC12	Air Canada	Canada	2022-07-15 11:22:33.000000	2022-07-15 15:50:12	
11	UA23	United Airlines	USA	2018-09-10 08:44:22.000000	2018-09-10 12:33:44	
12	DL34	Delta Airlines	USA	2019-11-05 17:33:11.000000	2019-11-05 21:12:45	
13	KLM45	KLM Royal Dutch Airlines	Netherlands	2020-02-12 14:12:33.000000	2020-02-12 17:45:22	
14	NZ56	Air New Zealand	New Zealand	2021-06-23 21:55:12.000000	2021-06-24 00:44:33	
15	MH67	Malaysia Airlines	Malaysia	2022-01-10 05:12:44.000000	2022-01-10 08:55:13	
16	THAI78	Thai Airways	Thailand	2018-04-16 12:22:11.000000	2018-04-16 15:45:22	
17	SA89	South African Airways	South Africa	2019-07-08 16:33:22.000000	2019-07-08 19:55:13	
18	AZ91	Alitalia	Italy	2020-05-02 22:11:44.000000	2020-05-03 01:33:22	
19	IB12	Iberia	Spain	2021-08-15 08:44:33.000000	2021-08-15 12:11:45	
20	VN23	Vietnam Airlines	Vietnam	2022-09-12 14:12:55.000000	2022-09-12 17:55:22	
21	SU34	Aeroflot	Russia	2018-10-03 07:22:11.000000	2018-10-03 11:00:44	

Database Explorer Database Sessions Tx > Output airport_bd.public.airline ×

airline_id : airline_code : airline_name : airline_country : created_at : updated_at

airline_id	airline_code	airline_name	airline_country	created_at	updated_at
22	CA45	Air China	China	2019-12-18 19:11:22.000000	2019-12-18 22:44:33
23	MU56	China Eastern	China	2020-03-10 04:33:11.000000	2020-03-10 08:22:44
24	CZ67	China Southern	China	2021-05-22 15:12:33.000000	2021-05-22 18:44:22
25	AI78	Air India	India	2022-07-30 21:33:11.000000	2022-07-31 01:12:44
26	TG89	Thai Airways	Thailand	2018-01-19 03:11:22.000000	2018-01-19 06:55:13
27	KL91	KLM	Netherlands	2019-04-05 09:22:33.000000	2019-04-05 13:00:13
28	LX12	Swiss International Air Lines	Switzerland	2020-06-27 17:11:22.000000	2020-06-27 21:44:33
29	OS23	Austrian Airlines	Austria	2021-09-14 06:44:11.000000	2021-09-14 10:33:22
30	SK34	SAS Scandinavian Airlines	Sweden	2022-11-20 20:22:33.000000	2022-11-20 23:55:44
31	AZ45	Alitalia	Italy	2018-02-28 10:11:22.000000	2018-02-28 13:44:33
32	IB56	Iberia	Spain	2019-03-15 14:22:33.000000	2019-03-15 18:00:44
33	VN67	Vietnam Airlines	Vietnam	2020-05-10 21:11:44.000000	2020-05-11 01:55:22
34	SU78	Aeroflot	Russia	2021-07-03 05:44:33.000000	2021-07-03 09:22:11
35	CA89	Air China	China	2022-09-17 12:22:11.000000	2022-09-17 16:55:33
36	MU91	China Eastern	China	2018-11-05 19:11:22.000000	2018-11-05 22:44:13
37	CZ12	China Southern	China	2019-01-28 03:44:33.000000	2019-01-28 07:22:44
38	AI23	Air India	India	2020-03-10 08:22:11.000000	2020-03-10 12:55:33
39	TG34	Thai Airways	Thailand	2021-05-15 16:11:44.000000	2021-05-15 20:44:22
40	KL45	KLM	Netherlands	2022-07-02 23:22:33.000000	2022-07-03 03:55:44
41	LX56	Swiss International Air Lines	Switzerland	2018-02-11 07:11:22.000000	2018-02-11 10:44:33
42	OS67	Austrian Airlines	Austria	2019-04-30 12:22:11.000000	2019-04-30 15:55:23

Database Consoles > postgres@localhost [2] > Database Explorer Database Sessions Tx > Output airport_bd.public.airline ×

airline_id : airline_code : airline_name : airline_country : created_at : updated_at

airline_id	airline_code	airline_name	airline_country	created_at	updated_at
43	SK78	SAS Scandinavian Airlines	Sweden	2020-06-18 18:33:44.000000	2020-06-18 22:00:13
44	AZ89	Alitalia	Italy	2021-09-05 02:11:22.000000	2021-09-05 05:44:33
45	IB91	Iberia	Spain	2022-11-12 09:22:33.000000	2022-11-12 13:55:44
46	VN12	Vietnam Airlines	Vietnam	2018-01-18 14:11:22.000000	2018-01-18 18:44:33
47	SU23	Aeroflot	Russia	2019-03-27 21:33:11.000000	2019-03-28 01:22:44
48	CA34	Air China	China	2020-05-05 05:22:33.000000	2020-05-05 09:55:13
49	MU45	China Eastern	China	2021-07-14 12:11:22.000000	2021-07-14 16:44:33
50	CZ56	China Southern	China	2022-09-21 19:22:11.000000	2022-09-21 23:55:44
51	AI67	Air India	India	2018-02-10 08:12:33.000000	2018-02-10 11:44:22
52	TG78	Thai Airways	Thailand	2019-03-22 14:33:11.000000	2019-03-22 18:11:44
53	KL89	KLM	Netherlands	2020-05-15 20:12:22.000000	2020-05-16 00:44:33
54	LX91	Swiss International Air Lines	Switzerland	2021-07-08 05:11:44.000000	2021-07-08 09:55:13
55	OS12	Austrian Airlines	Austria	2022-09-19 12:22:33.000000	2022-09-19 16:44:22
56	SK23	SAS Scandinavian Airlines	Sweden	2023-01-03 19:11:22.000000	2023-01-03 22:55:44
57	AZ34	Alitalia	Italy	2024-02-14 08:33:11.000000	2024-02-14 12:22:44
58	IB45	Iberia	Spain	2024-03-18 14:22:33.000000	2024-03-18 18:55:13
59	VN56	Vietnam Airlines	Vietnam	2024-04-22 20:11:22.000000	2024-04-23 00:44:33
60	SU67	Aeroflot	Russia	2018-05-10 06:22:11.000000	2018-05-10 10:44:33
61	CA78	Air China	China	2019-06-15 12:11:44.000000	2019-06-15 16:33:22
62	MU89	China Eastern	China	2020-07-20 18:22:33.000000	2020-07-20 22:55:44
63	CZ91	China Southern	China	2021-08-03 04:11:22.000000	2021-08-03 08:44:33

Database Explorer Database Sessions

Tx > Output airport_bd.public.airline

200 rows ▾ Tx: Auto ▾ DDL ▾ CSV ▾

	airline_id	airline_code	airline_name	airline_country	created_at	updated_at
64	64	AI12	Air India	India	2022-09-12 10:22:33.000000	2022-09-12 14:55:22
65	65	TG23	Thai Airways	Thailand	2023-10-05 16:11:44.000000	2023-10-05 20:44:33
66	66	KL34	KLM	Netherlands	2024-01-18 22:22:11.000000	2024-01-19 02:55:40
67	67	LX45	Swiss International Air Lines	Switzerland	2024-02-28 06:11:22.000000	2024-02-28 10:44:33
68	68	OS56	Austrian Airlines	Austria	2024-03-12 12:22:33.000000	2024-03-12 16:55:11
69	69	SK67	SAS Scandinavian Airlines	Sweden	2024-04-26 18:11:44.000000	2024-04-26 22:44:22
70	70	AZ78	Alitalia	Italy	2018-06-15 08:22:11.000000	2018-06-15 03:55:33
71	71	IB89	Iberia	Spain	2019-07-30 06:11:22.000000	2019-07-30 10:44:33
72	72	VN91	Vietnam Airlines	Vietnam	2020-08-20 12:22:33.000000	2020-08-20 16:55:11
73	73	SU12	Aeroflot	Russia	2021-09-05 18:11:44.000000	2021-09-05 22:44:22
74	74	CA23	Air China	China	2022-10-18 08:22:11.000000	2022-10-18 03:55:33
75	75	MU34	China Eastern	China	2023-11-02 06:11:22.000000	2023-11-02 10:44:33
76	76	CZ45	China Southern	China	2024-01-25 12:22:33.000000	2024-01-25 16:55:11
77	77	AI56	Air India	India	2024-02-10 18:11:44.000000	2024-02-10 22:44:22
78	78	TG67	Thai Airways	Thailand	2024-03-20 08:22:11.000000	2024-03-20 03:55:33
79	79	KL78	KLM	Netherlands	2024-04-15 06:11:22.000000	2024-04-15 10:44:33
80	80	LX89	Swiss International Air Lines	Switzerland	2024-05-30 12:22:33.000000	2024-05-30 16:55:11
81	81	OS91	Austrian Airlines	Austria	2024-06-10 18:11:44.000000	2024-06-10 22:44:22
82	82	SK12	SAS Scandinavian Airlines	Sweden	2024-07-22 08:22:11.000000	2024-07-22 03:55:33
83	83	AZ23	Alitalia	Italy	2024-08-15 06:11:22.000000	2024-08-15 10:44:33
84	84	IB34	Iberia	Spain	2024-09-30 12:22:33.000000	2024-09-30 16:55:11
85	85	VN45	Vietnam Airlines	Vietnam	2024-10-12 18:11:44.000000	2024-10-12 22:44:22
86	86	SU56	Aeroflot	Russia	2024-11-05 08:22:11.000000	2024-11-05 03:55:33
87	87	CA67	Air China	China	2024-12-18 06:11:22.000000	2024-12-18 10:44:33
88	88	MU78	China Eastern	China	2018-01-03 12:22:33.000000	2018-01-03 16:55:11
89	89	CZ89	China Southern	China	2019-02-15 18:11:44.000000	2019-02-15 22:44:22
90	90	AI91	Air India	India	2020-03-28 08:22:11.000000	2020-03-28 03:55:33
91	91	TG12	Thai Airways	Thailand	2021-04-10 06:11:22.000000	2021-04-10 10:44:33
92	92	KL23	KLM	Netherlands	2022-05-22 12:22:33.000000	2022-05-22 16:55:11
93	93	LX34	Swiss International Air Lines	Switzerland	2023-06-15 18:11:44.000000	2023-06-15 22:44:22
94	94	OS45	Austrian Airlines	Austria	2024-07-28 08:22:11.000000	2024-07-28 03:55:33
95	95	SK56	SAS Scandinavian Airlines	Sweden	2024-08-10 06:11:22.000000	2024-08-10 10:44:33
96	96	AZ67	Alitalia	Italy	2024-09-22 12:22:33.000000	2024-09-22 16:55:11
97	97	IB78	Iberia	Spain	2024-10-05 18:11:44.000000	2024-10-05 22:44:22
98	98	VN89	Vietnam Airlines	Vietnam	2024-11-18 08:22:11.000000	2024-11-18 03:55:33
99	99	SU91	Aeroflot	Russia	2024-12-30 06:11:22.000000	2024-12-30 10:44:33
100	100	CA12	Air China	China	2018-01-12 12:22:33.000000	2018-01-12 16:55:11
101	101	MU23	China Eastern	China	2018-02-05 08:22:11.000000	2018-02-05 12:44:33
102	102	CZ34	China Southern	China	2019-03-18 14:11:22.000000	2019-03-18 18:55:44
103	103	AI45	Air India	India	2020-05-12 20:22:33.000000	2020-05-13 00:44:22
104	104	TG56	Thai Airways	Thailand	2021-07-07 06:11:44.000000	2021-07-07 10:44:33
105	105	KL67	KLM	Netherlands	2022-09-21 12:22:11.000000	2022-09-21 16:55:40

Database Consoles > postgres@localhost [2] > console_4 [postgres@localhost [2]]

1:23 LF UTF-8 4 spaces ⌂ ⌂

Database Explorer Database Sessions Tx > Output airport_bd.public.airline

	airline_id	airline_code	airline_name	airline_country	created_at	updated_at
106	106	LX78	Swiss International Air Lines	Switzerland	2023-01-10 18:11:22.000000	2023-01-10 22:44:33
107	107	OS89	Austrian Airlines	Austria	2024-02-15 00:22:33.000000	2024-02-15 04:55:11
108	108	SK91	SAS Scandinavian Airlines	Sweden	2024-03-28 06:11:44.000000	2024-03-28 10:44:22
109	109	AZ12	Alitalia	Italy	2024-04-12 12:22:33.000000	2024-04-12 16:55:44
110	110	IB23	Iberia	Spain	2024-05-25 18:11:22.000000	2024-05-25 22:44:33
111	111	VN34	Vietnam Airlines	Vietnam	2024-06-08 00:22:11.000000	2024-06-08 04:55:40
112	112	SU45	Aeroflot	Russia	2024-07-21 06:11:22.000000	2024-07-21 10:44:33
113	113	CA56	Air China	China	2024-08-04 12:22:33.000000	2024-08-04 16:55:44
114	114	MU67	China Eastern	China	2024-09-17 18:11:22.000000	2024-09-17 22:44:33
115	115	CZ78	China Southern	China	2024-10-30 00:22:11.000000	2024-10-30 04:55:40
116	116	AI89	Air India	India	2018-01-15 06:11:22.000000	2018-01-15 10:44:33
117	117	TG91	Thai Airways	Thailand	2019-02-28 12:22:33.000000	2019-02-28 16:55:44
118	118	KL12	KLM	Netherlands	2020-03-12 18:11:22.000000	2020-03-12 22:44:33
119	119	LX23	Swiss International Air Lines	Switzerland	2021-04-25 00:22:11.000000	2021-04-25 04:55:44
120	120	OS34	Austrian Airlines	Austria	2022-06-08 06:11:22.000000	2022-06-08 10:44:33
121	121	SK45	SAS Scandinavian Airlines	Sweden	2023-07-21 12:22:33.000000	2023-07-21 16:55:44
122	122	AZ56	Alitalia	Italy	2024-01-03 18:11:22.000000	2024-01-03 22:44:33
123	123	IB67	Iberia	Spain	2024-02-16 00:22:11.000000	2024-02-16 04:55:44
124	124	VN78	Vietnam Airlines	Vietnam	2024-03-29 06:11:22.000000	2024-03-29 10:44:33
125	125	SU89	Aeroflot	Russia	2024-05-12 12:22:33.000000	2024-05-12 16:55:44
126	126	CA91	Air China	China	2024-06-25 18:11:22.000000	2024-06-25 22:44:33
127	127	MU12	China Eastern	China	2024-08-07 00:22:11.000000	2024-08-07 04:55:44
128	128	CZ23	China Southern	China	2024-09-20 06:11:22.000000	2024-09-20 10:44:33
129	129	AI34	Air India	India	2024-11-02 12:22:33.000000	2024-11-02 16:55:44
130	130	TG45	Thai Airways	Thailand	2024-12-15 18:11:22.000000	2024-12-15 22:44:33
131	131	KL56	KLM	Netherlands	2018-01-28 00:22:11.000000	2018-01-28 04:55:44
132	132	LX67	Swiss International Air Lines	Switzerland	2019-03-12 06:11:22.000000	2019-03-12 10:44:33
133	133	OS78	Austrian Airlines	Austria	2020-04-25 12:22:33.000000	2020-04-25 16:55:44
134	134	SK89	SAS Scandinavian Airlines	Sweden	2021-06-08 18:11:22.000000	2021-06-08 22:44:33
135	135	AZ91	Alitalia	Italy	2022-07-21 00:22:11.000000	2022-07-21 04:55:44
136	136	IB12	Iberia	Spain	2023-09-03 06:11:22.000000	2023-09-03 10:44:33
137	137	VN23	Vietnam Airlines	Vietnam	2024-01-16 12:22:33.000000	2024-01-16 16:55:44
138	138	SU34	Aeroflot	Russia	2024-02-29 18:11:22.000000	2024-02-29 22:44:33
139	139	CA45	Air China	China	2024-04-12 00:22:11.000000	2024-04-12 04:55:44
140	140	MU56	China Eastern	China	2024-05-25 06:11:22.000000	2024-05-25 10:44:33
141	141	CZ67	China Southern	China	2024-07-07 12:22:33.000000	2024-07-07 16:55:44
142	142	AI78	Air India	India	2024-08-20 18:11:22.000000	2024-08-20 22:44:33
143	143	TG89	Thai Airways	Thailand	2024-10-02 00:22:11.000000	2024-10-02 04:55:44
144	144	KL91	KLM	Netherlands	2024-11-15 06:11:22.000000	2024-11-15 10:44:33
145	145	LX12	Swiss International Air Lines	Switzerland	2024-12-28 12:22:33.000000	2024-12-28 16:55:44
146	146	OS23	Austrian Airlines	Austria	2018-01-10 18:11:22.000000	2018-01-10 22:44:33
147	147	SK34	SAS Scandinavian Airlines	Sweden	2019-03-23 00:22:11.000000	2019-03-23 04:55:44

Database Consoles > postgres@localhost [2] > console_4 [postgres@localhost [2]]

Database Explorer Database Sessions

Output airport_bd.public.airline

airline_id	airline_code	airline_name	airline_country	created_at	updated_at
148	AZ45	Alitalia	Italy	2020-05-05 06:11:22.000000	2020-05-05 10:44:33
149	IB56	Iberia	Spain	2021-06-18 12:22:33.000000	2021-06-18 16:55:44
150	VN67	Vietnam Airlines	Vietnam	2022-08-01 18:11:22.000000	2022-08-01 22:44:33
151	SU78	Aeroflot	Russia	2024-01-05 08:11:22.000000	2024-01-05 12:44:33
152	CA89	Air China	China	2024-02-18 14:22:33.000000	2024-02-18 18:55:44
153	MU91	China Eastern	China	2024-03-12 20:11:22.000000	2024-03-13 06:44:33
154	CZ12	China Southern	China	2024-04-25 06:22:11.000000	2024-04-25 10:55:44
155	AI23	Air India	India	2024-05-08 12:11:22.000000	2024-05-08 16:44:33
156	TG34	Thai Airways	Thailand	2024-06-21 18:22:33.000000	2024-06-21 22:55:44
157	KL45	KLM	Netherlands	2024-08-03 00:11:22.000000	2024-08-03 04:44:33
158	LX56	Swiss International Air Lines	Switzerland	2024-09-16 06:22:33.000000	2024-09-16 10:55:44
159	OS67	Austrian Airlines	Austria	2024-10-29 12:11:22.000000	2024-10-29 16:44:33
160	SK78	SAS Scandinavian Airlines	Sweden	2024-12-11 18:22:33.000000	2024-12-11 22:55:44
161	AZ89	Alitalia	Italy	2018-01-15 00:11:22.000000	2018-01-15 04:44:33
162	IB91	Iberia	Spain	2019-03-28 06:22:33.000000	2019-03-28 10:55:44
163	VN12	Vietnam Airlines	Vietnam	2020-05-10 12:11:22.000000	2020-05-10 16:44:33
164	SU23	Aeroflot	Russia	2021-06-23 18:22:33.000000	2021-06-23 22:55:44
165	CA34	Air China	China	2022-08-05 06:11:22.000000	2022-08-05 10:44:33
166	MU45	China Eastern	China	2023-09-18 06:22:33.000000	2023-09-18 10:55:44
167	CZ56	China Southern	China	2024-01-01 12:11:22.000000	2024-01-01 16:44:33
168	AI67	Air India	India	2024-02-14 18:22:33.000000	2024-02-14 22:55:44

Database Consoles > postgres@localhost [2] > Database Explorer Database Sessions

Output airport_bd.public.airline

airline_id	airline_code	airline_name	airline_country	created_at	updated_at
169	TG78	Thai Airways	Thailand	2024-03-27 00:11:22.000000	2024-03-27 04:44:33
170	KL89	KLM	Netherlands	2024-05-09 06:22:33.000000	2024-05-09 10:55:44
171	LX91	Swiss International Air Lines	Switzerland	2024-06-22 12:11:22.000000	2024-06-22 16:44:33
172	OS12	Austrian Airlines	Austria	2024-08-04 18:22:33.000000	2024-08-04 22:55:44
173	SK23	SAS Scandinavian Airlines	Sweden	2024-09-17 00:11:22.000000	2024-09-17 04:44:33
174	AZ34	Alitalia	Italy	2024-10-30 06:22:33.000000	2024-10-30 10:55:44
175	IB45	Iberia	Spain	2024-12-12 12:11:22.000000	2024-12-12 16:44:33
176	VN56	Vietnam Airlines	Vietnam	2018-01-25 18:22:33.000000	2018-01-25 22:55:44
177	SU67	Aeroflot	Russia	2019-03-08 00:11:22.000000	2019-03-08 04:44:33
178	CA78	Air China	China	2020-04-21 06:22:33.000000	2020-04-21 10:55:44
179	MU89	China Eastern	China	2021-06-03 12:11:22.000000	2021-06-03 16:44:33
180	CZ91	China Southern	China	2022-07-16 18:22:33.000000	2022-07-16 22:55:44
181	AI12	Air India	India	2023-08-28 00:11:22.000000	2023-08-28 04:44:33
182	TG23	Thai Airways	Thailand	2024-01-10 06:22:33.000000	2024-01-10 10:55:44
183	KL34	KLM	Netherlands	2024-02-23 12:11:22.000000	2024-02-23 16:44:33
184	LX45	Swiss International Air Lines	Switzerland	2024-04-07 18:22:33.000000	2024-04-07 22:55:44
185	OS56	Austrian Airlines	Austria	2024-05-20 00:11:22.000000	2024-05-20 04:44:33
186	SK67	SAS Scandinavian Airlines	Sweden	2024-07-02 06:22:33.000000	2024-07-02 10:55:44
187	AZ78	Alitalia	Italy	2024-08-15 12:11:22.000000	2024-08-15 16:44:33
188	IB89	Iberia	Spain	2024-09-27 18:22:33.000000	2024-09-27 22:55:44
189	VN91	Vietnam Airlines	Vietnam	2024-11-09 00:11:22.000000	2024-11-09 04:44:33

Database Consoles > postgres@localhost [2] > Database Explorer Database Sessions

Database Explorer

Database Sessions

Tx > Output airport_bd.public.airline

	airline_id	airline_code	airline_name	airline_country	created_at	updated_at
185	185	OS56	Austrian Airlines	Austria	2024-05-20 00:11:22.000000	2024-05-20 04:44:33
186	186	SK67	SAS Scandinavian Airlines	Sweden	2024-07-02 06:22:33.000000	2024-07-02 10:55:44
187	187	AZ78	Alitalia	Italy	2024-08-15 12:11:22.000000	2024-08-15 16:44:33
188	188	IB89	Iberia	Spain	2024-09-27 18:22:33.000000	2024-09-27 22:55:44
189	189	VN91	Vietnam Airlines	Vietnam	2024-11-09 00:11:22.000000	2024-11-09 04:44:33
190	190	SU12	Aeroflot	Russia	2024-12-22 06:22:33.000000	2024-12-22 10:55:44
191	191	CA23	Air China	China	2018-01-05 12:11:22.000000	2018-01-05 16:44:33
192	192	MU34	China Eastern	China	2019-03-18 18:22:33.000000	2019-03-18 22:55:44
193	193	CZ45	China Southern	China	2020-05-01 00:11:22.000000	2020-05-01 04:44:33
194	194	AI56	Air India	India	2021-06-14 06:22:33.000000	2021-06-14 10:55:44
195	195	TG67	Thai Airways	Thailand	2022-08-26 12:11:22.000000	2022-08-26 16:44:33
196	196	KL78	KLM	Netherlands	2023-10-09 18:22:33.000000	2023-10-09 22:55:44
197	197	LX89	Swiss International Air Lines	Switzerland	2024-01-21 00:11:22.000000	2024-01-21 04:44:33
198	198	OS91	Austrian Airlines	Austria	2024-03-05 06:22:33.000000	2024-03-05 10:55:44
199	199	SK12	SAS Scandinavian Airlines	Sweden	2024-04-18 12:11:22.000000	2024-04-18 16:44:33
200	200	AZ23	Alitalia	Italy	2024-06-01 18:22:33.000000	2024-06-01 22:55:44

Database Consoles > postgres@localhost [2] > console_4 [postgres@localhost [2]]

13. List the top5 most recently created airlines.

Database Explorer

Database Sessions

Tx > Output airport_bd.public.airline

	airline_id	airline_code	airline_name	airline_country	created_at	updated_at
1	203	FH	FlyHigh	Brazil	2025-09-24 03:43:24.938481	2025-09-24 03:43:24.9
2	202	AE	AirEasy	France	2025-09-24 03:43:24.938481	2025-09-24 03:43:24.9
3	204	FF	FlyFly	Poland	2025-09-24 03:43:24.938481	2025-09-24 03:43:24.9
4	201	KA	KazAir	Turkey	2025-09-24 03:37:55.040027	2025-09-24 03:37:55.0
5	99	SU91	Aeroflot	Russia	2024-12-30 06:11:22.000000	2024-12-30 10:44:33.6

Database Consoles > postgres@localhost [2] > console_4 [postgres@localhost [2]]

```
SELECT * FROM airline ORDER BY created_at DESC LIMIT 5;
```

14. Return all rows where booking_id is between 200 and 300 inclusive and check_result <> 'Checked'.

The screenshot shows a PostgreSQL database interface with two panes. The left pane, "Database Explorer", lists tables in the "public" schema: airline, airport, baggage, baggage_check, boarding_pass, booking, booking_flight, flights, and passengers. The right pane, "console_4 [postgres@localhost [2]]", contains a SQL query:

```
SELECT b.booking_id,b.flight_id,b.passenger_id,b.booking_platform,b.created_at,
       b.updated_at,b.status,b.ticket_price,s.check_result
  FROM booking b JOIN security_check s ON b.passenger_id = s.passenger_id
 WHERE b.booking_id BETWEEN 200 AND 300 AND s.check_result <> 'Checked';
```

The results pane shows one row of data:

booking_id	flight_id	passenger_id	booking_platform	created_at	updated_at
200	15	108	Mobile App	2025-09-30 14:13:35.191000	2025-09-30 14:13:35.191000

The screenshot shows a PostgreSQL database interface with two panes. The left pane, "Database Explorer", lists tables in the "public" schema: airline, airport, baggage, baggage_check, boarding_pass, booking, booking_flight, flights, and passengers. The right pane, "console_4 [postgres@localhost [2]]", contains a SQL query:

```
SELECT b.booking_id,b.flight_id,b.passenger_id,b.booking_platform,b.created_at,
       b.updated_at,b.status,b.ticket_price,s.check_result
  FROM booking b JOIN security_check s ON b.passenger_id = s.passenger_id
 WHERE b.booking_id BETWEEN 200 AND 300 AND s.check_result <> 'Checked';
```

The results pane shows one row of data:

booking_id	flight_id	passenger_id	booking_platform	created_at	updated_at	status	ticket_price	check_result
108	Mobile App	2025-09-30 14:13:35.191000	2025-09-30 14:13:35.191000	Confirmed	650.00	Failed		

```
SELECT
b.booking_id,b.flight_id,b.passenger_id,b.booking_platform,b.created_at,
       b.updated_at,b.status,b.ticket_price,s.check_result
  FROM booking b JOIN security_check s ON b.passenger_id = s.passenger_id
 WHERE b.booking_id BETWEEN 200 AND 300 AND s.check_result <> 'Checked';
```

15. Baggage checks where update_at is in the same month as created_at but occurs earlier than created_at.

The screenshot shows a PostgreSQL database interface. In the top right, there's a 'Playground' tab. Below it, the 'Output' tab is active, showing the results of a query:

```
SELECT * FROM baggage_check
WHERE DATE_TRUNC('month', updated_at) = DATE_TRUNC('month', created_at) AND updated_at < created_at;
```

In the bottom left, the 'Database Sessions' pane shows a single session named 'airport_bd.public'. The session details include:

- Tx: Auto
- DDL: Off
- Search: Off
- CSV: On
- LF: On
- UTF-8: On
- 4 spaces: On

The bottom right corner displays the time as 1:10 and various status icons.

```
SELECT * FROM baggage_check
WHERE DATE_TRUNC('month', updated_at) = DATE_TRUNC('month', created_at) AND
updated_at < created_at;
```