

LAB WORK 3. Nurlan Olzhas

The screenshot shows the pgAdmin 4 interface with the 'airport_db' database selected. The 'passengers' table is highlighted in the Object Explorer. The Query Editor displays the following SQL script:

```
5484 ALTER TABLE booking ADD FOREIGN KEY (passenger_id) REFERENCES passengers(passenger_id);
5485 ALTER TABLE baggage ADD FOREIGN KEY (booking_id) REFERENCES booking(booking_id);
5486 ALTER TABLE flights ADD FOREIGN KEY (airline_id) REFERENCES airline(airline_id);
5487 ALTER TABLE flights ADD FOREIGN KEY (departure_airport_id) REFERENCES airport(airport_id);
5488 ALTER TABLE flights ADD FOREIGN KEY (arrival_airport_id) REFERENCES airport(airport_id);
5489 ALTER TABLE boarding_pass ADD FOREIGN KEY (booking_id) REFERENCES booking(booking_id);
5490 ALTER TABLE booking_flight ADD FOREIGN KEY (booking_id) REFERENCES booking(booking_id);
5491 ALTER TABLE booking_flight ADD FOREIGN KEY (flight_id) REFERENCES flights(flight_id);
5492
5493 SELECT * FROM passengers;
5494 SELECT * FROM passengers WHERE first_name = last_name;
```

The Data Output pane shows the results of the second query, displaying a single row for a passenger named Damir.

passenger_id	first_name	last_name	date_of_birth	gender	country_of_citizenship	country_of_residence	passport_number	create_date
1	201	Damir	1992-11-22	Male	France	Russia	003346315-8	2024

Total rows: 1 Query complete 00:00:00.068

The screenshot shows the pgAdmin 4 interface with the 'airport_db' database selected. The 'passengers' table is highlighted in the Object Explorer. The Query Editor displays the following SQL script:

```
5484 ALTER TABLE booking ADD FOREIGN KEY (passenger_id) REFERENCES passengers(passenger_id);
5485 ALTER TABLE baggage ADD FOREIGN KEY (booking_id) REFERENCES booking(booking_id);
5486 ALTER TABLE flights ADD FOREIGN KEY (airline_id) REFERENCES airline(airline_id);
5487 ALTER TABLE flights ADD FOREIGN KEY (departure_airport_id) REFERENCES airport(airport_id);
5488 ALTER TABLE flights ADD FOREIGN KEY (arrival_airport_id) REFERENCES airport(airport_id);
5489 ALTER TABLE boarding_pass ADD FOREIGN KEY (booking_id) REFERENCES booking(booking_id);
5490 ALTER TABLE booking_flight ADD FOREIGN KEY (booking_id) REFERENCES booking(booking_id);
5491 ALTER TABLE booking_flight ADD FOREIGN KEY (flight_id) REFERENCES flights(flight_id);
5492
5493 SELECT * FROM passengers;
5494 SELECT * FROM passengers WHERE first_name = last_name;
5495 SELECT DISTINCT last_name FROM passengers;
```

The Data Output pane shows the results of the third query, displaying a list of distinct last names.

last_name
1 Kearton
2 Broun
3 Groarty
4 Damir
5 Hardman
6 Payne
7 Mixter
8 Gheorghe
9 Golsby
10 McGennis
11 Danihelka
12 Musla
13 Lynett

Total rows: 200 Query complete 00:00:00.090

pgAdmin 4

Object Explorer

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Query History

```
5407 ALTER TABLE flights ADD FOREIGN KEY (departure_airport_id) REFERENCES airport(airport_id);
5408 ALTER TABLE flights ADD FOREIGN KEY (arrival_airport_id) REFERENCES airport(airport_id);
5409 ALTER TABLE boarding_pass ADD FOREIGN KEY (booking_id) REFERENCES booking(booking_id);
5410 ALTER TABLE booking_flight ADD FOREIGN KEY (booking_id) REFERENCES booking(booking_id);
5411 ALTER TABLE booking_flight ADD FOREIGN KEY (flight_id) REFERENCES flights(flight_id);
5412
5413 SELECT *FROM passengers;
5414 SELECT *FROM passengers WHERE first_name = last_name;
5415 SELECT DISTINCT last_name FROM passengers;
5416 SELECT *FROM passengers WHERE gender = 'Male' and date_of_birth between '1990-01-01' and '20
5417
5418
5419
```

Data Output

passenger_id	first_name	last_name	date_of_birth	gender	country_of_citizenship	country_of_residence	passport_number	create_date
1	Wayne	Bangs	1996-04-22	Male	Bosnia and Herzegovina	Canada	512588744-7	2023-11-18
2	Conrad	Southerell	1998-01-25	Male	France	Japan	765817217-0	2023-11-18
3	Wood	Yve	1997-01-18	Male	Latvia	China	985023334-6	2023-11-18
4	Warden	Huett	2000-11-04	Male	Brazil	Portugal	389393096-5	2023-11-18
5	Peyton	Dumian	1993-09-16	Male	Russia	China	846269581-3	2023-11-18
6	Spencer	Moffet	1994-11-01	Male	Colombia	Philippines	127047949-0	2023-11-18
7	Boote	Laurisch	1996-09-12	Male	Philippines	Bahamas	780593281-6	2023-11-18
8	Pyotr	Colbron	1993-07-17	Male	China	China	582600382-0	2023-11-18
9	Hurleigh	Goodwell	1990-05-21	Male	China	Russia	147114524-7	2023-11-18
10	Cletus	Mosey	1997-09-23	Male	Myanmar	Indonesia	874794787-X	2023-11-18
11	Fairfax	Brahmer	1991-02-10	Male	Morocco	Portugal	702800724-3	2023-11-18
12	Hayward	Keeler	1991-05-20	Male	Serbia	China	932998861-X	2023-11-18

Total rows: 42 Query complete 00:00:00.111

pgAdmin 4

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Query History

```
5411 ALTER TABLE booking_flight ADD FOREIGN KEY (flight_id) REFERENCES flights(flight_id);
5412
5413 SELECT *FROM passengers;
5414 SELECT *FROM passengers WHERE first_name = last_name;
5415 SELECT DISTINCT last_name FROM passengers;
5416 SELECT *FROM passengers WHERE gender = 'Male' and date_of_birth between '1990-01-01' and '20
5417
5418 SELECT *FROM flights f JOIN airport a ON f.arrival_airport_id = a.airport_id WHERE a.country =
5419 SELECT *
5420 FROM airline
5421 WHERE airline_country IN ('France', 'Portugal', 'Poland')
5422 AND created_at BETWEEN '2023-11-01' AND '2024-03-31';
5423
```

Data Output

airline_id	airline_code	airline_name	airline_country	created_at	update_at
1	OOKB	KHS	France	2023-11-18	2024-02-18
2	OIFE	IFH	Portugal	2024-01-09	2023-11-09
3	SYKZ	KKG	Poland	2023-12-24	2023-10-30
4	ZSRG	RUG	Portugal	2024-03-11	2023-08-24
5	RKPD	JDG	Poland	2023-11-03	2023-12-06
6	CYST	YST	Poland	2023-11-24	2023-10-07
7	AYKM	KMA	France	2023-11-21	2023-05-30

Total rows: 7 Query complete 00:00:00.111

pgAdmin 4

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Query

```
SELECT *FROM airline ORDER BY created_at DESC LIMIT 5;
SELECT *FROM baggage_check WHERE booking_id BETWEEN 200 AND 300 AND check_result = 'Checked';
SELECT *FROM baggage_check WHERE DATE_TRUNC('month', update_at) = DATE_TRUNC('month', created_at)
AND update_at < created_at;
SELECT f.*
FROM flights f
JOIN airport a ON f.arrival_airport_id = a.airport_id
WHERE a.country = 'China';
```

Data Output

flight_id	flight_no	scheduled_departure	scheduled_arrival	departure_airport_id	arrival_airport_id	departing_gate	arriving_gate	airline_id
1	3 FI-OL	2023-03-29	2023-08-01	18	12	47	9	34
2	3 FI-OL	2023-03-29	2023-08-01	18	12	47	9	34
3	9 IN-OR	2023-05-18	2023-09-19	6	9	659	621	13
4	9 IN-OR	2023-05-18	2023-09-19	6	9	659	621	13
5	13 BR-PE	2024-01-16	2023-06-02	13	20	1891	5429	1
6	13 BR-PE	2024-01-16	2023-06-02	13	20	1891	5429	1
7	14 US-IN	2023-07-24	2024-02-27	18	3	973	297	8
8	14 US-IN	2023-07-24	2024-02-27	18	3	973	297	8
9	23 CN-65	2023-03-21	2024-01-08	2	3	934	3006	17
10	23 CN-65	2023-03-21	2024-01-08	2	3	934	3006	17
11	24 BR-TO	2024-03-09	2023-11-22	3	9	561	242	19
12	24 BR-TO	2024-03-09	2023-11-22	3	9	561	242	19

Total rows: 476 Query complete 00:00:00.351

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Query

```
SELECT first_name, last_name from passengers ORDER BY date_of_birth DESC LIMIT 1;
SELECT booking_platform, MIN(price) AS cheapest_price FROM booking GROUP BY booking_platform;
SELECT *FROM airline where airline_code ~ '[0-9]';
SELECT *FROM airline ORDER BY created_at DESC LIMIT 5;
SELECT *FROM baggage_check WHERE booking_id BETWEEN 200 AND 300 AND check_result = 'Checked';
SELECT *FROM baggage_check WHERE DATE_TRUNC('month', update_at) = DATE_TRUNC('month', created_at)
AND update_at < created_at;
```

Data Output

baggage_check_id	check_result	created_at	update_at	booking_id	passenger_id
1	34 Checked	2023-04-25	2023-04-08	28	57
2	86 Checked	2023-12-25	2023-12-07	312	22
3	104 Checked	2024-03-17	2024-03-14	41	83
4	109 Not checked	2023-08-30	2023-08-09	469	91
5	119 Not checked	2023-12-02	2023-12-01	135	55
6	148 Checked	2024-03-17	2024-03-16	86	5
7	219 Checked	2023-04-17	2023-04-14	233	200
8	248 Not checked	2023-06-22	2023-06-09	449	60
9	251 Not checked	2023-06-19	2023-06-16	260	26
10	299 Checked	2023-04-26	2023-04-08	385	191
11	304 Not checked	2023-07-29	2023-07-22	210	10
12	396 Not checked	2023-07-13	2023-07-01	37	144
13	412 Not checked	2023-09-30	2023-09-27	347	70

Total rows: 18 Query complete 00:00:00.133