LAB WORK 6. Nurlan Olzhas.

1.

2.

3.


```sql
WITH NextMonth AS (
    SELECT DATE('2025-12-01') AS start_date, DATE('2026-01-01') AS end_date
)
SELECT
    A.airline_name
FROM
    airline A
LEFT JOIN
    flights F ON A.airline_id = F.airline_id
            AND F.scheduled_departure >= (SELECT start_date FROM NextMonth)
            AND F.scheduled_departure < (SELECT end_date FROM NextMonth)
GROUP BY
    A.airline_name
HAVING
    COUNT(F.flight_id) = 0;
```

4.


```sql
SELECT
    P.first_name,
    P.last_name,
    F.flight_no,
    BP.seat
FROM
    passengers P
JOIN
    booking B ON P.passenger_id = B.passenger_id
JOIN
    boarding_pass BP ON B.booking_id = BP.booking_id
JOIN
    booking_flight BF ON B.booking_id = BF.booking_id
JOIN
    flights F ON BF.flight_id = F.flight_id
WHERE
    F.flight_no = 'US-AK';
```

5.


```sql
SELECT
    F.flight_no,
    COUNT(BF.booking_id) AS total_bookings,
    AVG(B.price) AS average_price,
    SUM(B.price) AS total_revenue,
    MAX(B.price) AS maximum_price,
    MIN(B.price) AS minimum_price
FROM
    flights F
JOIN
    booking_flight BF ON F.flight_id = BF.flight_id
JOIN
    booking B ON BF.booking_id = B.booking_id
GROUP BY
    F.flight_no
ORDER BY
    total_revenue DESC;
```

	flight_no	total_bookings	average_price	total_revenue	maximum_price	minimum_price
1	US-AK	22	5304.880000000000000	116707.36	9976.50	445.82
2	AU-NT	18	5510.8566666666666667	99195.42	9977.57	149.52
3	US-TX	15	5923.0486666666666667	88845.73	9266.00	980.80
4	US-CA	16	5383.9943750000000000	86143.91	9693.81	143.78
5	US-AZ	11	6519.1054545454545455	71710.16	9849.54	2847.84
6	GB-ENG	14	4968.5378571428571429	69559.53	9293.16	277.29
7	CA-BC	11	5872.1072727272727273	64593.18	9693.81	696.00
8	CA-ON	11	5784.5018181818181818	63629.52	9932.12	373.11
9	CA-NU	11	4838.3390909090909091	53221.73	9520.76	473.95
10	US-IA	11	4551.4527272727272727	50065.98	9932.12	521.06
11	US-KS	10	4887.2540000000000000	48872.54	9702.57	156.83
12	AU-WA	10	4714.8560000000000000	47148.56	8929.20	917.99

Total rows: 384   Query complete 00:00:00.153

6.


```sql
SELECT
    F.flight_no,
    A.airline_name,
    AP_Dep.city AS departure_city,
    AP_Arr.city AS arrival_city,
    AP_Arr.country AS arrival_country
FROM
    flights F
JOIN
    airline A ON F.airline_id = A.airline_id
JOIN
    airport AP_Arr ON F.arrival_airport_id = AP_Arr.airport_id
JOIN
    airport AP_Dep ON F.departure_airport_id = AP_Dep.airport_id
WHERE
    AP_Arr.country = 'China'
ORDER BY
    F.scheduled_departure;
```

	flight_no	airline_name	departure_city	arrival_city	arrival_country
1	FR-V	NGL	New Sibonga	Luodian	China
2	FR-V	NGL	New Sibonga	Luodian	China
3	FR-V	NGL	New Sibonga	Luodian	China
4	FR-V	NGL	New Sibonga	Luodian	China
5	FR-V	NGL	New Sibonga	Luodian	China
6	FR-V	NGL	New Sibonga	Luodian	China
7	FR-V	NGL	New Sibonga	Luodian	China
8	FR-V	NGL	New Sibonga	Luodian	China
9	CN-44	GYA	Cankova	Linfen	China
10	CN-44	GYA	Cankova	Linfen	China
11	CN-44	GYA	Cankova	Linfen	China
12	CN-44	GYA	Cankova	Linfen	China

Total rows: 1904   Query complete 00:00:00.121

7.

```
105        P.date_of_birth,
106        AP.city AS arrival_city,
107        AP.country AS arrival_country
108    FROM
109        passengers P
110    JOIN
111        booking B ON P.passenger_id = B.passenger_id
112    JOIN
113        booking_flight BF ON B.booking_id = BF.booking_id
114    JOIN
115        flights F ON BF.flight_id = F.flight_id
116    JOIN
117        airport AP ON F.arrival_airport_id = AP.airport_id
118    WHERE
119        P.date_of_birth > DATE('2007-11-02')
120    GROUP BY
121        P.first_name, P.last_name, P.date_of_birth, AP.city, AP.country
122    ORDER BY
123        P.date_of_birth DESC;
```

	first_name character varying (50)	last_name character varying (50)	date_of_birth date	arrival_city character varying (50)	arrival_country character varying (50)
1	Bernie	Michal	2009-11-03	Cankova	Slovenia
2	Vivyan	Mallabone	2009-11-01	Cankova	Slovenia
3	Vivyan	Mallabone	2009-11-01	Dubrava	Croatia
4	Vivyan	Mallabone	2009-11-01	Hilotongan	Philippines
5	Vivyan	Mallabone	2009-11-01	Shuting	China
6	Vivyan	Mallabone	2009-11-01	Wilmington	United States
7	Ynez	Bortoloni	2009-10-01	Polykárpi	Greece
8	Cleve	Edgeler	2009-04-20	Dubrava	Croatia
9	Cleve	Edgeler	2009-04-20	Guihulñgan	Philippines
10	Cleve	Edgeler	2009-04-20	Mlawe	Indonesia
11	Cleve	Edgeler	2009-04-20	Rogóźno	Poland
12	Cleve	Edgeler	2009-04-20	Tielu	China

Total rows: 30   Query complete 00:00:00.064

8.

```
127    SELECT
128        P.first_name || ' ' || P.last_name AS full_name,
129        P.passport_number,
130        AP.airport_name AS arrival_airport,
131        F.actual_arrival
132    FROM
133        passengers P
134    JOIN
135        booking B ON P.passenger_id = B.passenger_id
136    JOIN
137        booking_flight BF ON B.booking_id = BF.booking_id
138    JOIN
139        flights F ON BF.flight_id = F.flight_id
140    JOIN
141        airport AP ON F.arrival_airport_id = AP.airport_id
142    WHERE
143        F.actual_arrival IS NOT NULL
144    ORDER BY
145        F.actual_arrival DESC;
```

	full_name text	passport_number character varying (50)	arrival_airport character varying (50)	actual_arrival date
1	Quintina Werrett	980147004-6	Bermuda Dunes Airport	2024-03-17
2	Ninetta Musla	923180864-8	Bermuda Dunes Airport	2024-03-17
3	Ferdinand Maxwell	273418310-2	Alert Bay Airport	2024-03-17
4	Ferdinand Maxwell	273418310-2	Alert Bay Airport	2024-03-17
5	Ferdinand Maxwell	273418310-2	Alert Bay Airport	2024-03-17
6	Ferdinand Maxwell	273418310-2	Alert Bay Airport	2024-03-17
7	Quintina Werrett	980147004-6	Bermuda Dunes Airport	2024-03-17
8	Quintina Werrett	980147004-6	Bermuda Dunes Airport	2024-03-17
9	Malynda Chapple	477941008-8	Longana Airport	2024-03-17
10	Malynda Chapple	477941008-8	Longana Airport	2024-03-17
11	Malynda Chapple	477941008-8	Longana Airport	2024-03-17
12	Malynda Chapple	477941008-8	Longana Airport	2024-03-17

Total rows: 4000   Query complete 00:00:00.117

9.

SQL query visible in the editor:

```sql
144  ORDER BY
145      F.actual_arrival DESC;
146
147
148  SELECT
149      AP.country AS airport_country,
150      A.airline_country AS airline_home_country,
151      F.flight_no,
152      AP.airport_name AS departure_airport
153  FROM
154      flights F
155  JOIN
156      airline A ON F.airline_id = A.airline_id
157  JOIN
158      airport AP ON F.departure_airport_id = AP.airport_id
159  WHERE
160      A.airline_country = AP.country
161  ORDER BY
162      AP.country, F.flight_no;
```

Data Output:

	airport_country character varying (50)	airline_home_country character varying (50)	flight_no character varying (50)	departure_airport character varying (50)
1	Brazil	Brazil	CL-AR	Figari Sud-Corse Airport
2	Brazil	Brazil	CL-AR	Figari Sud-Corse Airport
3	Brazil	Brazil	CL-AR	Figari Sud-Corse Airport
4	Brazil	Brazil	CL-AR	Figari Sud-Corse Airport
5	Brazil	Brazil	IT-45	Figari Sud-Corse Airport
6	Brazil	Brazil	IT-45	Figari Sud-Corse Airport
7	Brazil	Brazil	IT-45	Figari Sud-Corse Airport
8	Brazil	Brazil	IT-45	Figari Sud-Corse Airport
9	Brazil	Brazil	PG-WPD	Figari Sud-Corse Airport
10	Brazil	Brazil	PG-WPD	Figari Sud-Corse Airport
11	Brazil	Brazil	PG-WPD	Figari Sud-Corse Airport
12	Brazil	Brazil	PG-WPD	Figari Sud-Corse Airport

Total rows: 296   Query complete 00:00:00.074

Showing rows: 1 to 296   Page No: 1   of 1