LAB 6

#1


```sql
SELECT f.flight_id, f.flight_no, f.scheduled_departure, f.scheduled_arrival,
       f.departure_airport_id, f.arrival_airport_id, f.status,
       a.airline_name, a.airline_code
FROM airline as a
INNER JOIN flights as f
ON a.airline_id = f.airline_id
WHERE airline_name = 'SMM'
```

#2


```sql
SELECT f.*, a.airport_name
FROM airport as a
INNER JOIN flights as f
ON f.departure_airport_id = a.airport_id
```

#3

#4

```sql
SELECT a.*
FROM airline AS a
LEFT JOIN flights AS f
    ON a.airline_id = f.airline_id
    AND EXTRACT(YEAR FROM f.scheduled_departure) = EXTRACT(YEAR FROM DATE '2023-11-11')
    AND EXTRACT(MONTH FROM f.scheduled_departure) = EXTRACT(MONTH FROM DATE '2023-11-11') + 1
WHERE f.flight_id IS NULL
```

	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	2	YPDA	PDN	Brazil	2024-01-15	2023-11-23
2	22	2AK6	HGZ	Philippines	2024-03-13	2023-10-20
3	23	KSPI	SPI	United States	2023-07-29	2023-12-28
4	25	LFKC	CLY	France	2023-09-04	2023-06-19
5	32	UAKK	KGF	Indonesia	2023-07-07	2023-12-25
6	35	SPSO	PIO	Costa Rica	2023-07-03	2023-12-01
7	36	VNJP	JKR	China	2023-04-15	2024-01-23
8	38	HYL	HYL	Yemen	2023-05-09	2024-02-24
9	49	[null]	PQS	Poland	2023-04-21	2023-09-08

Total rows: 9   Query complete 00:00:00.111

#5

```sql
SELECT *
FROM booking_flight AS bf
INNER JOIN booking AS bo
    ON bf.booking_id = bo.booking_id
INNER JOIN passengers AS p
    ON bo.passenger_id = p.passenger_id
WHERE bf.flight_id = 26
```

	booking_flight_id integer	booking_id integer	flight_id integer	created_at date	update_at date	booking_id integer	passenger_id integer	booking_platform character varying (50)	created_at date	update_at date
1	678	131	26	2023-09-09	2023-08-07	131	179	Hessel Inc	2023-06-02	2023-10-24
2	324	300	26	2023-09-18	2023-07-18	300	150	Stokes, Stokes and Mayer	2023-12-28	2023-11-12

Total rows: 2   Query complete 00:00:00.091

#6

```sql
SELECT bf.flight_id,
       AVG(b.price) AS average_price,
       SUM(b.price) AS total_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
GROUP BY bf.flight_id;
```

flight_id integer	average_price numeric	total_price numeric	max_price numeric	min_price numeric
846	7070.4500000000000000	7070.45	7070.45	7070.45
790	7988.9500000000000000	15977.90	9851.86	6126.04
828	5974.5400000000000000	5974.54	5974.54	5974.54
938	4635.8600000000000000	4635.86	4635.86	4635.86
184	2856.2000000000000000	5712.40	3529.26	2183.14
753	3153.7100000000000000	3153.71	3153.71	3153.71
273	8929.2000000000000000	8929.20	8929.20	8929.20
951	3034.5400000000000000	6069.08	5888.12	180.96
70	683.2700000000000000	683.27	683.27	683.27
190	8217.5600000000000000	8217.56	8217.56	8217.56
867	6575.3900000000000000	6575.39	6575.39	6575.39
350	5936.7680000000000000	29683.84	9792.28	2520.04

Total rows: 614   Query complete 00:00:00.108

#7

```sql
SELECT f.*, a.airline_name, ap.airport_name AS arrival_airport_name
FROM flights f
JOIN airline a ON f.airline_id = a.airline_id
JOIN airport ap ON f.arrival_airport_id = ap.airport_id
WHERE ap.country = 'Russia';
```

flight_id integer	flight_no character varying (50)	scheduled_departure date	scheduled_arrival date	departure_airport_id integer	arrival_airport_id integer	departing_gate character varying (50)	arriving_gate character va...
6	CA-SK	2023-07-07	2023-09-11	18	1	1576	72
20	US-MS	2024-02-06	2024-01-22	10	1	346	56
64	BR-PR	2023-07-24	2023-06-07	14	1	786	1095
79	US-AR	2023-12-29	2023-09-16	10	1	249	57
112	US-AK	2023-11-09	2023-10-04	8	1	27	119
148	US-FL	2023-05-08	2024-02-28	20	1	13	354
189	TD-OD	2023-12-14	2023-08-10	5	1	1788	1208
191	KZ-SEV	2023-08-06	2023-12-06	14	1	453	[null]
202	FI-LL	2023-09-23	2023-04-10	14	1	644	59
211	CN-32	2023-10-14	2023-06-27	13	1	[null]	3275
225	US-OK	2023-05-13	2023-08-08	7	1	1295	15

✓ Successfully run. Total query runtime: 45 msec. 56 rows affected.

Total rows: 56   Query complete 00:00:00.045

#8

Object Explorer
- 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
  - baggage
  - baggage_check
  - boarding_pass
  - booking
    - Columns (7)
      - booking_id
      - passenger_id
      - booking_platform
      - created_at
      - update_at
      - status

DBCourse/postgres@PostgreSQL 17

```sql
1  SELECT p.first_name, p.last_name, ap.airport_name AS arrival_destination
2  FROM passengers p
3  JOIN booking b ON p.passenger_id = b.passenger_id
4  JOIN booking_flight bf ON b.booking_id = bf.booking_id
5  JOIN flights f ON bf.flight_id = f.flight_id
6  JOIN airport ap ON f.arrival_airport_id = ap.airport_id
7  WHERE EXTRACT(YEAR FROM AGE(CURRENT_DATE, p.date_of_birth)) < 18;
8
```

Data Output   Messages   Notifications

Showing rows: 1 to 37   Page No: 1   of 1

	first_name character varying (50)	last_name character varying (50)	arrival_destination character varying (50)
1	Vivyan	Mallabone	Alert Bay Airport
2	Lester	Blades	Armidale Airport
3	Lester	Blades	Figari Sud-Corse Airport
4	Cleve	Edgeler	Industrial Airpark
5	Bradley	Grolle	Armidale Airport
6	Cleve	Edgeler	Fort Worth Alliance Airport
7	Gwennie	Chinnery	Elorza Airport
8	Cleve	Edgeler	Garbaharey Airport
9	Vivyan	Mallabone	Hana Airport
10	Bradley	Grolle	Lime Acres Finsch Mine Airport
11	Vivyan	Mallabone	Elorza Airport
12	Ronnica	Laybown	Hana Airport

Successfully run. Total query runtime: 67 msec. 37 rows affected.

Total rows: 37   Query complete 00:00:00.067   CRLF   Ln 8, Col 1

#9

Object Explorer
- 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
  - baggage
  - baggage_check
  - boarding_pass
  - booking
    - Columns (7)
      - booking_id
      - passenger_id
      - booking_platform
      - created_at
      - update_at
      - status

DBCourse/postgres@PostgreSQL 17

```sql
1  SELECT p.first_name || ' ' || p.last_name AS full_name, p.passport_number, f.actual_
2  FROM passengers p
3  JOIN booking b ON p.passenger_id = b.passenger_id
4  JOIN booking_flight bf ON b.booking_id = bf.booking_id
5  JOIN flights f ON bf.flight_id = f.flight_id;
6
```

Data Output   Messages   Notifications

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

	full_name text	passport_number character varying (50)	actual_arrival date
1	Muhammad Fass	109932770-9	2023-07-18
2	Trevar 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
9	Cesaro McGennis	364900190-X	2023-04-03
10	Con Borrel	837859465-3	2024-02-15
11	Lorianna Robbie	435354132-3	2024-01-19
12	Brad Apperley	842288763-0	2024-02-10

Successfully run. Total query runtime: 71 msec. 1000 rows affected.

Total rows: 1000   Query complete 00:00:00.071   CRLF   Ln 6, Col 1

File   Object   Tools   Edit   View   Window   Help

Object Explorer

DBCourse/postgres@PostgreSQL 17* ×   DBCourse/postgre... ×   DBCourse/postgre... ×

DBCourse/postgres@PostgreSQL 17

> Functions
> Materialized Views
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> Procedures
> Sequences
> Tables (10)
  > airline
    > Columns (6)
        airline_id
        airline_code
        airline_name
        airline_country
        created_at
        update_at
    > Constraints
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    > RLS Policies
    > Rules
    > Triggers
  > airport
  > baggage
  > baggage_check
  > boarding_pass
  > booking
    > Columns (7)
        booking_id
        passenger_id
        booking_platform
        created_at
        update_at
        status

No limit

```sql
1  SELECT ap.country, COUNT(f.flight_id) AS num_flights
2  FROM flights f
3  JOIN airline a ON f.airline_id = a.airline_id
4  JOIN airport ap ON f.departure_airport_id = ap.airport_id
5  WHERE a.airline_country = ap.country
6  GROUP BY ap.country;
7
```

Data Output   Messages   Notifications

SQL

Showing rows: 1 to 8   Page No: 1   of 1

	country character varying (50)	num_flights bigint
1	Indonesia	6
2	Slovenia	2
3	Greece	1
4	Russia	5
5	China	50
6	Brazil	5
7	Poland	2
8	Philippines	3

✓ Successfully run. Total query runtime: 69 msec. 8 rows affected.

Total rows: 8   Query complete 00:00:00.069   CRLF   Ln 7, Col 1