

Lab work 2Version control

Database Explorer

Lab\_db@localhost1 of 6

Lab\_db1 of 3

public

tables10

airline

airport

baggage

baggage\_check

boarding\_pass

booking

columns8

booking\_idinteger

flight\_idinteger

passenger\_idinteger

console\_1

Tx: AutoPlayground

Lab\_db.public

1select UPPER(airline.airline\_name) AS airlinesnames

2from airline;

Services

Database

Lab\_db@localhost

console\_11 s 416 ms

Spark Jobs

Outputairlinesnames:text

airlinesnames

7AIRLINE\_7

8AIRLINE\_8

9AIRLINE\_9

10AIRLINE\_10

11KAZAIR

12AIREASY

13FLYHIGH

14FLYFLY

14 rows

14 rows retrieved starting from 1 in 526 ms (execution: 13 ms, fetching: 513 ms)2:14 LF UTF-8 4 spaces

Lab work 2Version control

Database Explorer

Lab\_db@localhost1 of 6

- Lab\_db1 of 3
  - public
    - tables10
      - airline
      - airport
      - baggage
      - baggage\_check
      - boarding\_pass
      - booking
        - columns8
          - booking\_idinteger
          - flight\_idinteger
          - passenger\_idinteger

Services

Database

- Lab\_db@localhost
  - console\_1362 ms
  - Spark Jobs

Outputreplacednames:text

replacednames

1	aeroline_1
2	aeroline_2
3	aeroline_3
4	aeroline_4
5	aeroline_5
6	aeroline_6
7	aeroline_7
8	aeroline_8
9	aeroline_9
10	aeroline_10
11	Kazaero
12	aeroEasy
13	FlyHigh

14 rows

14 rows retrieved starting from 1 in 334 ms (execution: 5 ms, fetching: 329 ms)

1:40LFUTF-84 spaces

console\_1

Tx: AutoPlayground

Lab\_db.public

```
1 select replace(airline.airline_name, 'Air','aero') as replacednames
2 from airline;
```

Lab work 2Version control

console\_1flights

Lab\_db.public

1SELECT departing\_gate

2FROM flights

3WHERE airline\_id IN (1, 2)

4GROUP BY departing\_gate

5HAVING COUNT(DISTINCT airline\_id) = 2;

6

Services

Database

Lab\_db@localhost

console\_1358 ms

flights581 ms

Spark Jobs

Output

Lab\_db.public.flights

DDL

CSV

2 rows

departing\_gate

1G17

2G23

2 rows retrieved starting from 1 in 335 ms (execution: 10 ms, fetching: 325 ms)4:24 LF UTF-8 4 spaces

2 rows retrieved starting from 1 in 335 ms (execution: 10 ms, fetching: 325 ms)

4:24 LF UTF-8 4 spaces

Lab work 2Version control

console\_1flights

Tx: AutoPlayground

Lab\_db.public

1SELECT airport\_name

2FROM airport

3WHERE airport\_name ILIKE '%Regional%'

4AND airport\_name ILIKE '%Air%';

5

Services

Tx: +Database

Lab\_db@localhost

console\_1354 ms

flights581 ms

Spark Jobs

OutputLab\_db.public.airport

airport\_name

0 rows

0 rows retrieved in 331 ms (execution: 9 ms, fetching: 322 ms)2:13 LF UTF-8 4 spaces

Lab work 2 Version control

Database Explorer

Lab\_db@localhost

- booking\_flight
- flights
- passengers
  - columns 10
    - passenger\_id Integer
    - first\_name varchar(50)
    - last\_name varchar(50)
    - date\_of\_birth date
    - gender varchar(50)
    - country\_of\_citizenship varchar(50)
    - country\_of\_residence varchar(50)
    - passport\_number varchar(20)
    - created\_at timestamp

console\_1 flights

```
SELECT
  first_name,
  TO_CHAR(date_of_birth, 'Month DD, YYYY') AS formatted_birth_date
FROM passengers;
```

Services

Database

- Lab\_db@localhost
  - console\_1 374 ms
  - flights 581 ms
- Spark Jobs

Output Result 6

	first_name	formatted_birth_date
1	Name_1	September 02, 1966
2	Name_2	May 09, 1968
3	Name_3	March 13, 1986
4	Name_4	May 10, 2000
5	Name_5	April 28, 1965
6	Name_6	October 07, 1977
7	Name_7	March 15, 1999
8	Name_8	January 28, 1985
9	Name_9	June 16, 2000
10	Name_10	November 12, 1985
11	Name_11	April 03, 1988
12	Name_12	February 15, 1999
13	Name_13	May 09, 1981

200 rows retrieved starting from 1 in 350 ms (execution: 16 ms, fetching: 334 ms)

3:26 LF UTF-8 4 spaces

Lab work 2 Version control

Database Explorer

Lab\_db@localhost

- flights
  - columns 12
    - flight\_id integer
    - sch\_departure\_time timestamp**
    - sch\_arrival\_time timestamp
    - departing\_airport\_id integer
    - arriving\_airport\_id integer
    - departing\_gate text
    - arriving\_gate varchar(50)
    - airline\_id integer
    - act\_departure\_time timestamp
    - act\_arrival\_time timestamp
    - created\_at timestamp

console\_1 flights

```
1 ✓ SELECT departing_gate
2 FROM flights
3 WHERE sch_arrival_time > sch_departure_time;
4
```

Services

Database

- Lab\_db@localhost
  - console\_1 350 ms
  - flights 581 ms
  - Spark Jobs

Output Lab\_db.public.flights

departing\_gate

1	648
2	634
3	627
4	632
5	68
6	645
7	623
8	640
9	628
10	614
11	610
12	641
13	66

94 rows

94 rows retrieved starting from 1 in 328 ms (execution: 5 ms, fetching: 323 ms)

3:44 LF UTF-8 4 spaces

Lab work 2Version control

Database Explorer

Lab\_db@localhost

flights

columns 12

flight\_id Integer

sch\_departure\_time timestamp

sch\_arrival\_time timestamp

departing\_airport\_id Integer

arriving\_airport\_id Integer

departing\_gate text

arriving\_gate varchar(50)

airline\_id Integer

act\_departure\_time timestamp

act\_arrival\_time timestamp

created\_at timestamp

console\_1flights

Tx: AutoPlayground

Lab\_db.public

SELECT

first\_name,

CASE

WHEN AGE(date\_of\_birth) BETWEEN INTERVAL '18 years' AND INTERVAL '35 years' THEN 'Young'

WHEN AGE(date\_of\_birth) BETWEEN INTERVAL '36 years' AND INTERVAL '55 years' THEN 'Adult'

ELSE 'Other'

END AS age\_group

FROM passengers;

Services

Database

Lab\_db@localhost

console\_1 360 ms

flights 581 ms

Spark Jobs

OutputResult 8

CSV

first\_nameage\_group

1 Name\_1Other

2 Name\_2Other

3 Name\_3Adult

4 Name\_4Young

5 Name\_5Other

6 Name\_6Adult

7 Name\_7Young

8 Name\_8Adult

9 Name\_9Young

10 Name\_10Adult

11 Name\_11Adult

12 Name\_12Young

13 Name\_13Adult

200 rows

200 rows retrieved starting from 1 in 338 ms (execution: 7 ms, fetching: 331 ms)5:31 LF UTF-8 4 spaces

Lab work 2 Version control

Database Explorer

- Lab\_db@localhost 1 of 8
  - Lab\_db 1 of 3
    - public
      - tables 10
        - airline
        - airport
        - baggage
        - baggage\_check
        - boarding\_pass
        - booking
          - columns 8
            - booking\_id integer
            - flight\_id integer
            - passenger\_id integer

console\_1 flights

```
1 SELECT
2   booking_id,
3   ticket_price,
4   CASE
5     WHEN ticket_price < 100 THEN 'Cheap'
6     WHEN ticket_price BETWEEN 100 AND 300 THEN 'Medium'
7     ELSE 'Expensive'
8   END AS price_category
9 FROM booking;
```

Services

Database

- Lab\_db@localhost
  - console\_1 388 ms
  - flights 581 ms
  - Spark Jobs

Output Result 9

	booking_id	ticket_price	price_category
1	32	97391.54	Expensive
2	42	95112.28	Expensive
3	49	98151.97	Expensive
4	67	88559.25	Expensive
5	79	97297.57	Expensive
6	84	89140.31	Expensive
7	96	94259.61	Expensive
8	102	95965.55	Expensive
9	108	94905.38	Expensive
10	109	93567.57	Expensive
11	110	98782.14	Expensive
12	119	95567.71	Expensive
13	133	94231.14	Expensive

89 rows retrieved starting from 1 in 366 ms (execution: 15 ms, fetching: 351 ms)

2:15 LF UTF-8 4 spaces



Lab work 2Version control

Database Explorer

Lab\_db@localhost1 of 8

Lab\_db1 of 3

public

tables10

airline

columns8

airline\_idinteger

airline\_codevarchar(30)

airline\_namevarchar(50)

airline\_countryvarchar(50)

created\_attimestamp

updated\_attimestamp

keys1

indexes1

console\_1flights

Tx: AutoPlayground

Lab\_db.public

1SELECT

2airline\_country,

3COUNT(airline\_name) AS number\_of\_airlines

4FROM airline

5GROUP BY airline\_country

6ORDER BY number\_of\_airlines DESC;

7

Services

Tx

Database

Lab\_db@localhost

console\_1355 ms

flights581 ms

Spark Jobs

OutputResult 10

CSV

airline\_countrynumber\_of\_airlines

1France4

2Turkey2

3Poland2

4Japan2

5Germany1

6China1

7Brazil1

8UK1

8 rows

8 rows retrieved starting from 1 in 333 ms (execution: 5 ms, fetching: 328 ms)5:25 LF UTF-8 4 spaces