

## Task 1.

The screenshot shows the pgAdmin 4 interface. On the left, the 'Object Explorer' pane displays the database structure, with the 'passengers' table selected under the 'columns' folder. The table has 10 columns: passenger\_id, first\_name, last\_name, date\_of\_birth, gender, country\_of\_citizenship, country\_of\_residence, passport\_number, created\_at, and update\_at. The main pane shows a SQL query editor with the following code:

```
--lab5
--1
ALTER TABLE passengers
ADD CONSTRAINT chk CHECK (date_of_birth <= CURRENT_DATE - INTERVAL '18 years');
```

The 'Messages' pane at the bottom shows the query executed successfully in 41 msec. A notification box in the bottom right corner states: "You are currently running version 9.6 of pgAdmin 4, however the current version is 9.8. Please click [here](#) for more information."

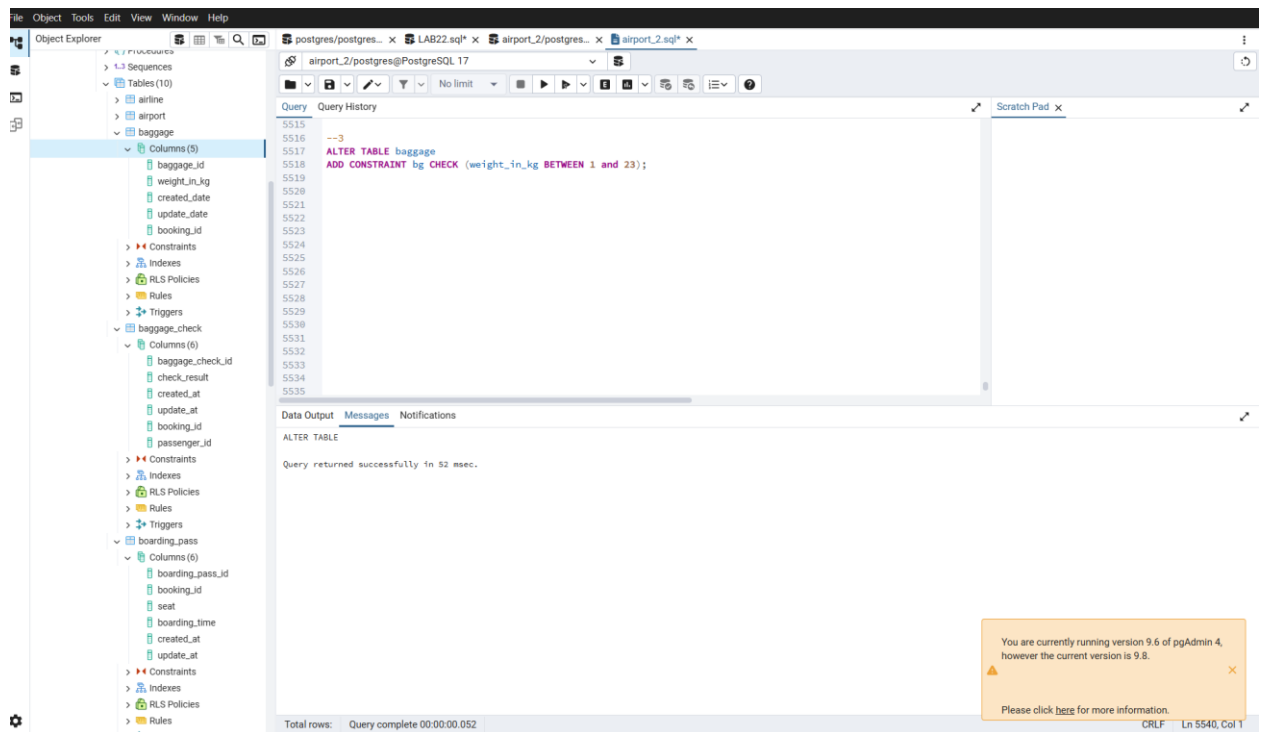
## Task 2.

The screenshot shows the pgAdmin 4 interface. On the left, the 'Object Explorer' pane displays the database structure, with the 'booking' table selected under the 'columns' folder. The table has 7 columns: booking\_id, passenger\_id, booking\_platform, created\_at, update\_at, status, and price. The main pane shows a SQL query editor with the following code:

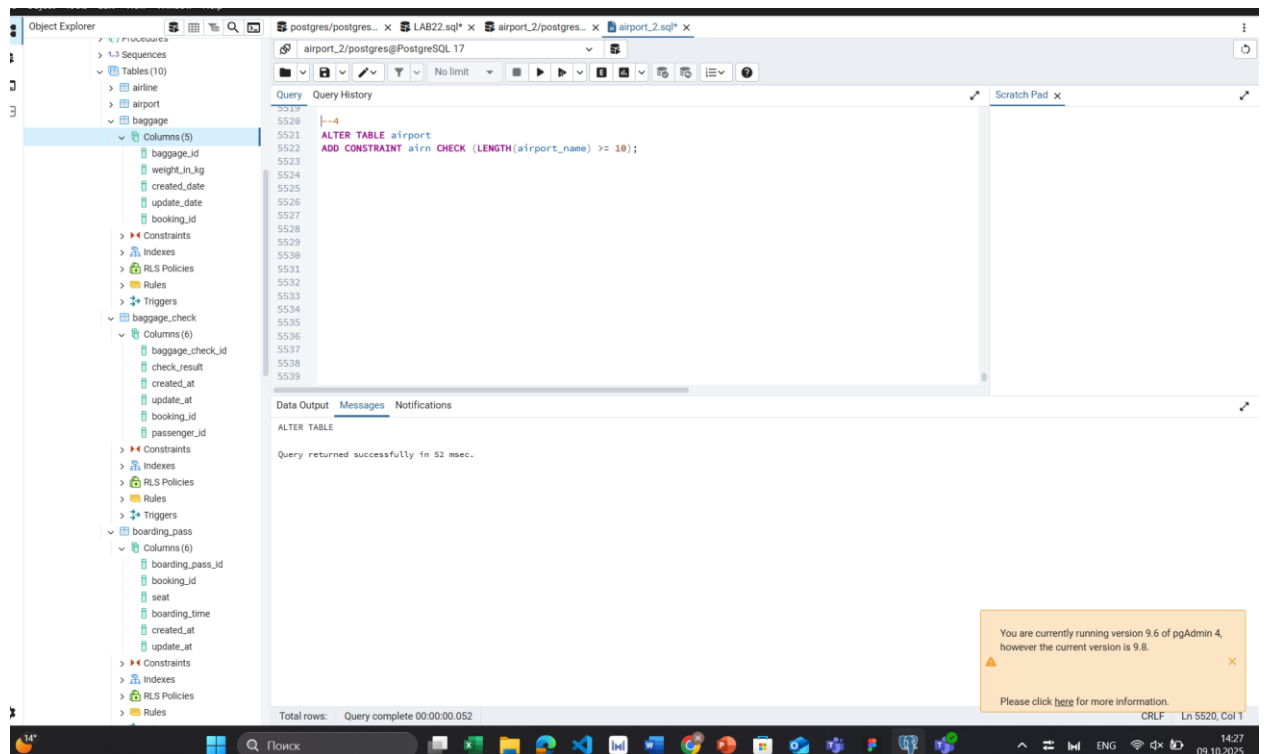
```
--2
ALTER TABLE booking
ADD CONSTRAINT prc CHECK (price >= 0 and price <= 50000 );
```

The 'Messages' pane at the bottom shows the query executed successfully in 59 msec. A notification box in the bottom right corner states: "You are currently running version 9.6 of pgAdmin 4, however the current version is 9.8. Please click [here](#) for more information."

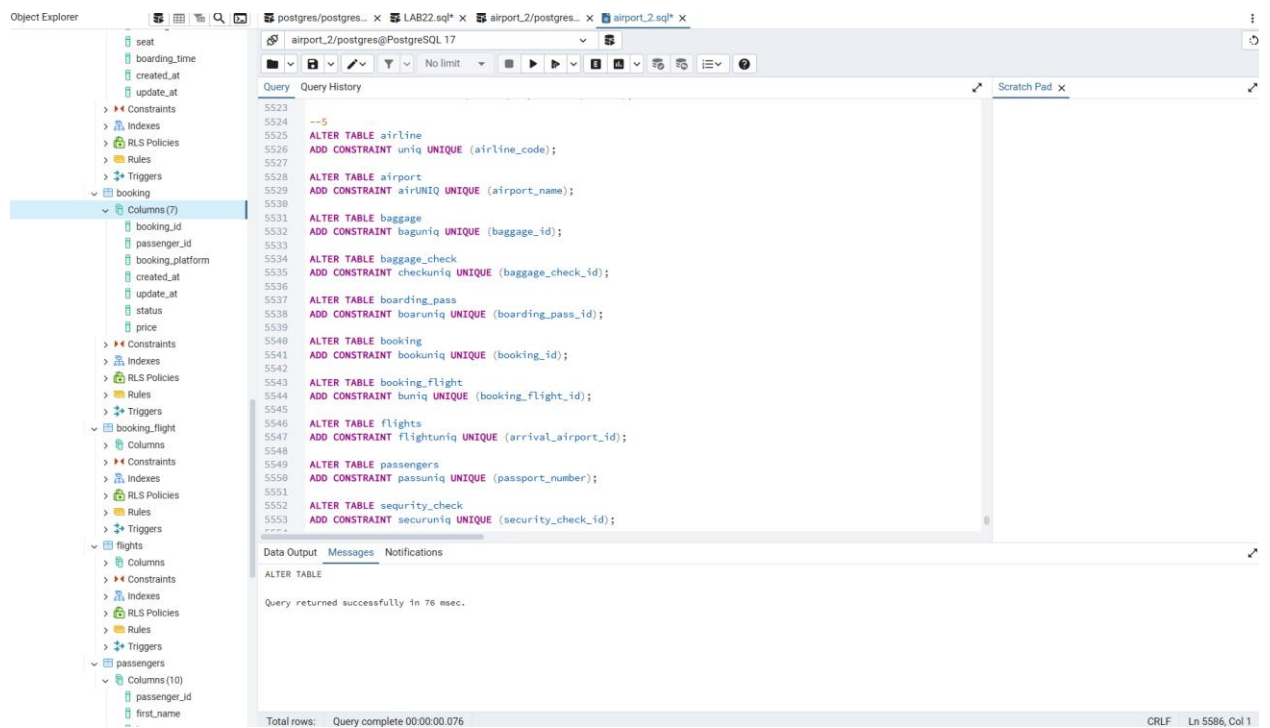
## Task 3.



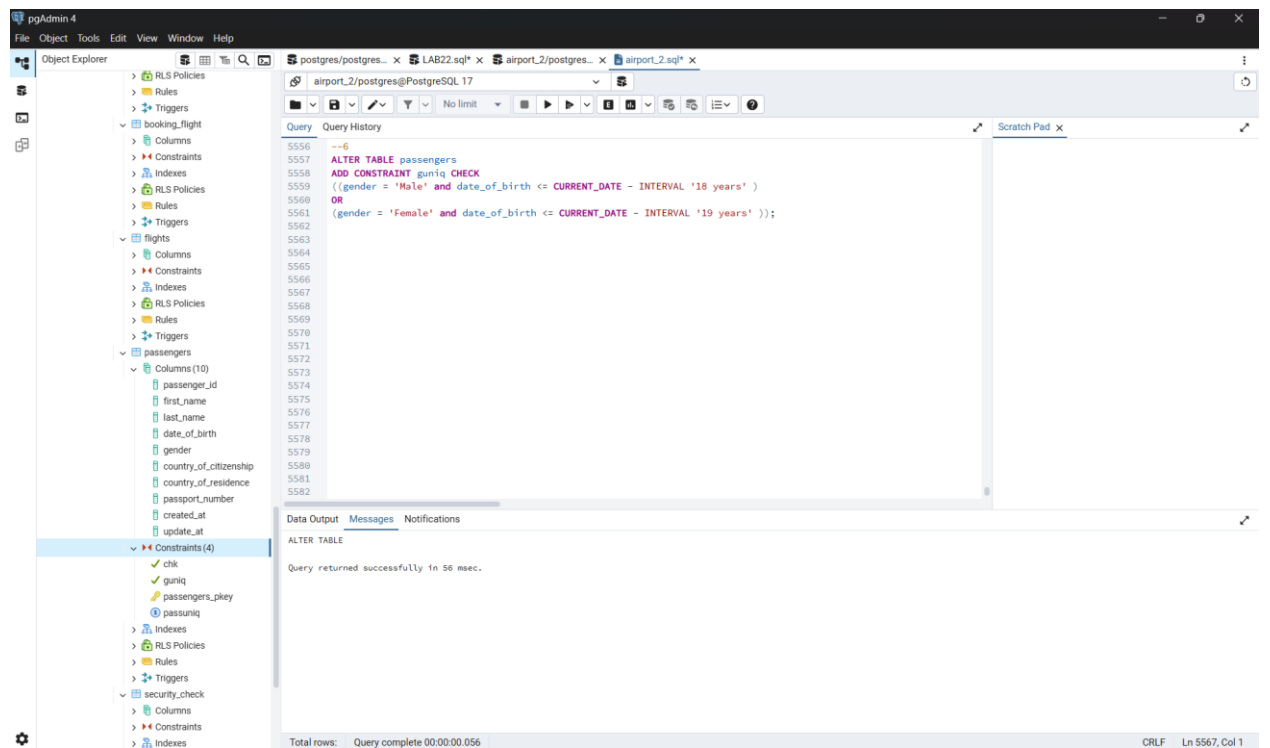
## Task 4



## Task 5



## Task 6



## Task 7

The screenshot shows the PostgreSQL Enterprise Studio interface. On the left, the Object Explorer displays the database schema, including tables like 'passengers' and 'flights'. The 'passengers' table is selected, showing its columns: passenger\_id, first\_name, last\_name, date\_of\_birth, gender, country\_of\_citizenship, country\_of\_residence, passport\_number, created\_at, and update\_at. The 'Constraints' section for 'passengers' is expanded, showing 'chk', 'guniq', 'passengers\_pkey', and 'passuniq'. The main query editor displays the following SQL code:

```
--7
ALTER TABLE passengers
ADD CONSTRAINT new1 CHECK(
(country_of_citizenship = 'Kazakhstan' AND date_of_birth <= CURRENT_DATE - INTERVAL '18 years')
OR
(country_of_citizenship = 'France' AND date_of_birth <= CURRENT_DATE - INTERVAL '17 years')
OR
(country_of_citizenship NOT IN ('Kazakhstan', 'France') AND date_of_birth <= CURRENT_DATE - INTERVAL '19 years'))
```

The 'Data Output' tab shows the message: 'ALTER TABLE Query returned successfully in 71 msec.' The status bar at the bottom indicates 'Total rows: Query complete 00:00:00.071' and 'CRLF Ln 5574, Col 1'.

## Task 8

The screenshot shows the PostgreSQL Enterprise Studio interface. On the left, the Object Explorer displays the database schema, including tables like 'booking' and 'flights'. The 'booking' table is selected, showing its columns: booking\_id, passenger\_id, booking\_platform, created\_at, update\_at, status, price, and discount. The 'Constraints' section for 'booking' is expanded, showing 'chk', 'guniq', 'passengers\_pkey', and 'passuniq'. The main query editor displays the following SQL code:

```
--8
ALTER TABLE booking
ADD COLUMN ticket_discount INT;

ALTER TABLE booking
ADD CONSTRAINT discount_check
CHECK (
(created_at >= DATE '2024-01-01' AND ticket_discount = 0.05)
OR
(created_at < DATE '2024-01-01' AND ticket_discount = 0.10)
);
```

The 'Data Output' tab shows the message: 'ALTER TABLE Query returned successfully in 76 msec.' The status bar at the bottom indicates 'Total rows: Query complete 00:00:00.076' and 'CRLF Ln 5586, Col 1'.