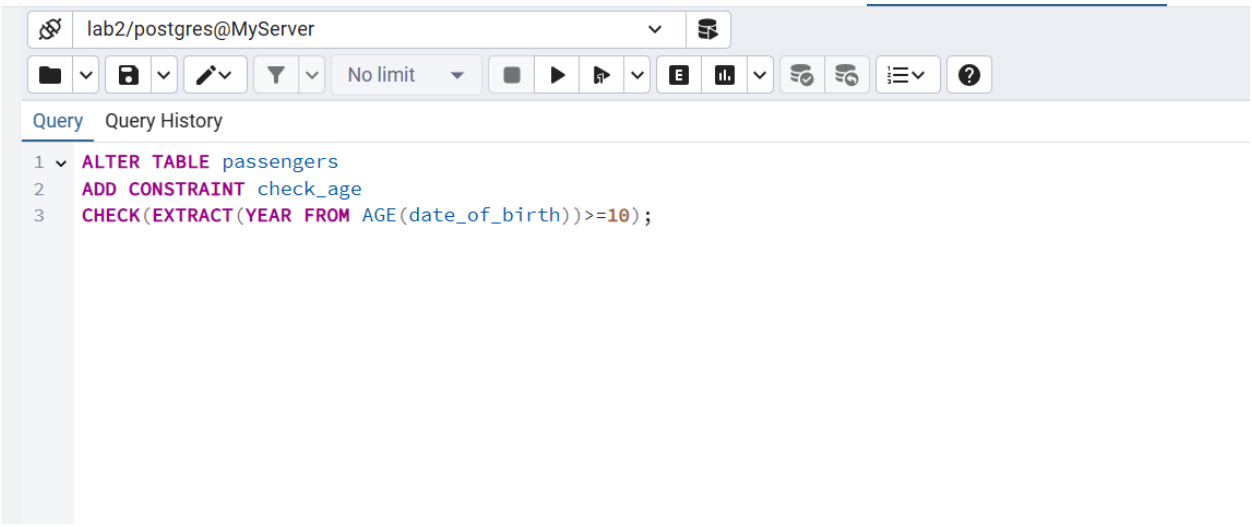
Abdykamat Adilet lab5 . DATABASES

1. Add a CHECK constraint to passenger table to provide that passengers must be at least 10 years old.

ALTER TABLE passenger

ADD CONSTRAINT check_age

CHECK (EXTRACT(YEAR FROM AGE(date_of_birth)) >= 10);

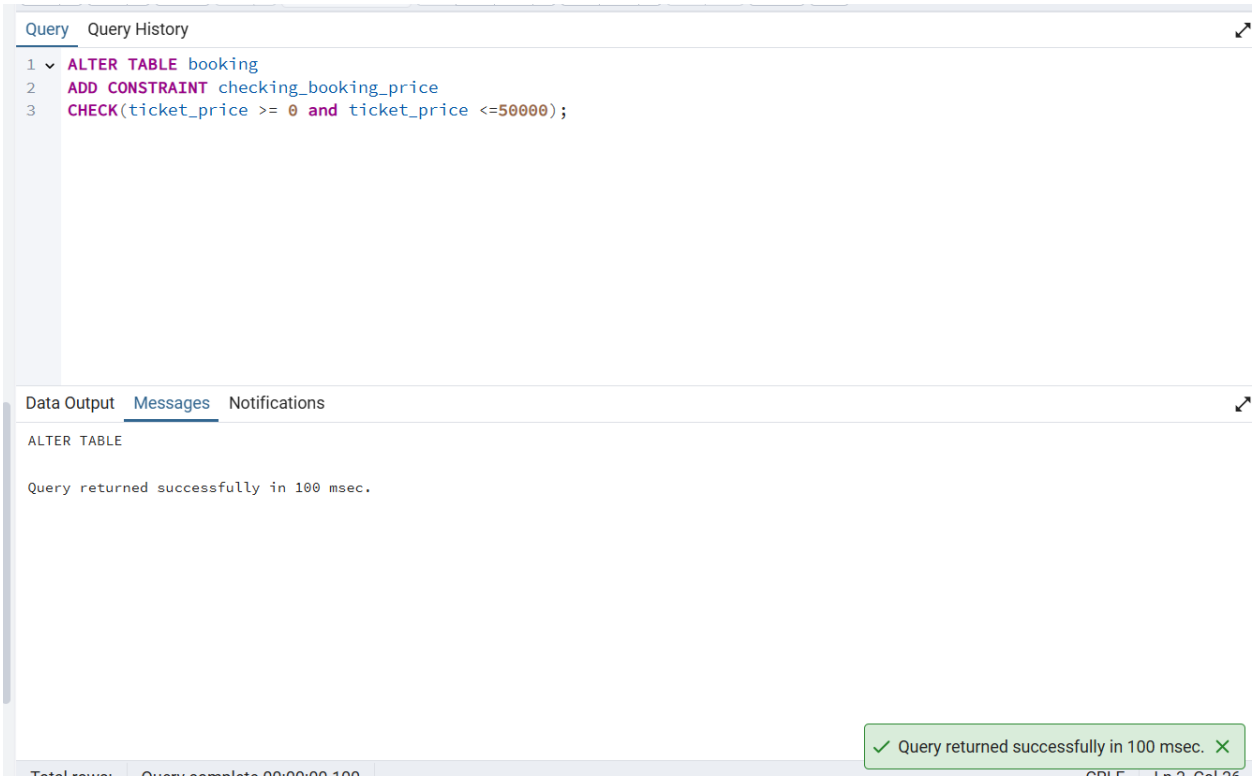


2. Add a CHECK constraint to accept values in booking price not more than 50000tg and less than 0tg.

ALTER TABLE booking

ADD CONSTRAINT checking_booking_price

CHECK(ticket_price >= 0 and ticket_price <=50000);



3. Add a CHECK constraint to accept the luggage weight between 1 and 23 kg.

ALTER TABLE baggage

ADD CONSTRAINT check_weight

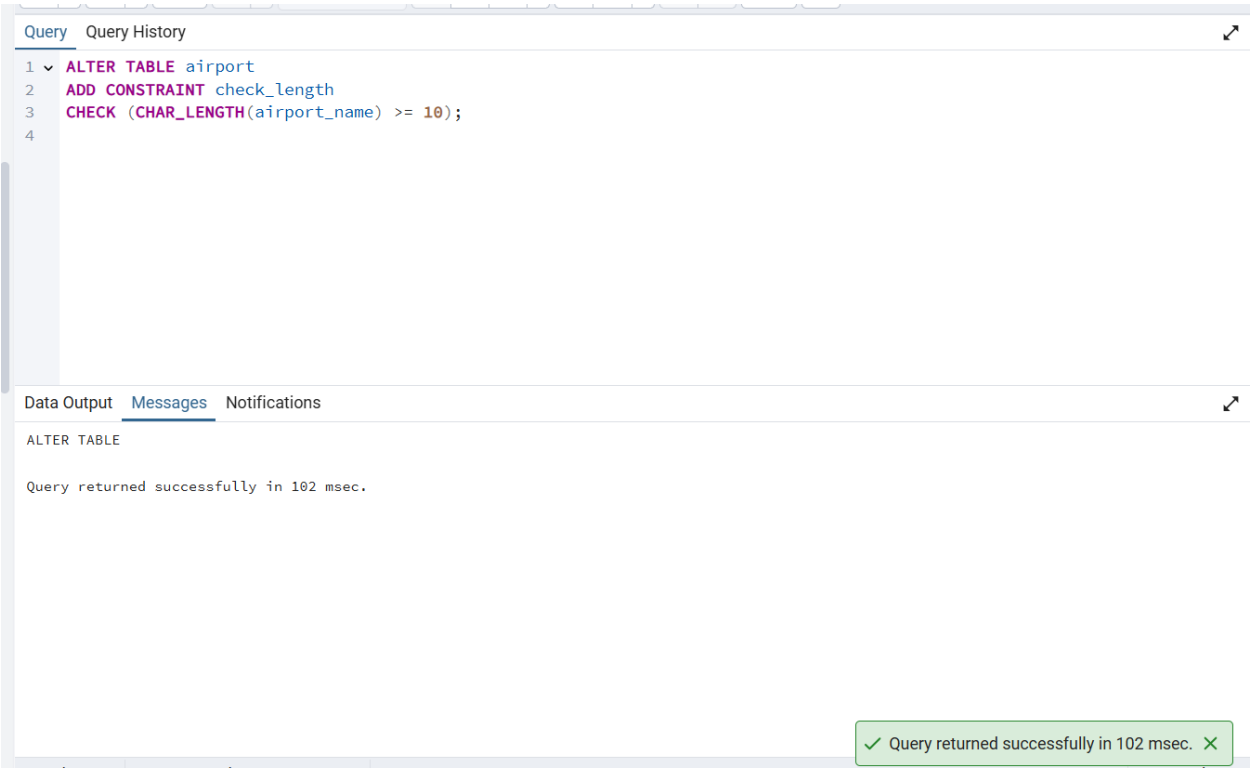
CHECK (weight_in_kg BETWEEN 1 AND 23);

4. Add a CHECK constraint to ensure that all values in airport_name must have at least 10 characters.

ALTER TABLE airport

ADD CONSTRAINT check_length

CHECK (CHAR_LENGTH(airport_name) >= 10);



5. Add UNIQUE constraint to some columns in each table in database.

ALTER TABLE passengers

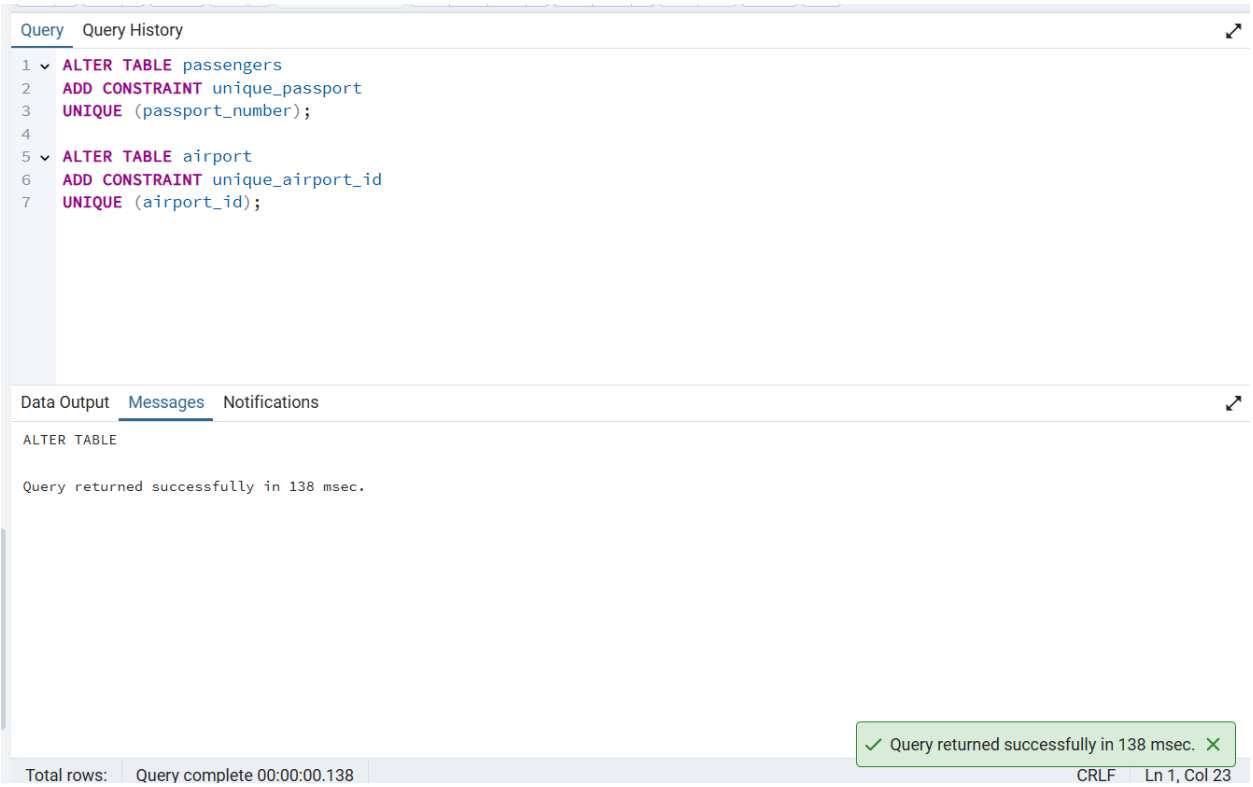
ADD CONSTRAINT unique_passport

UNIQUE (passport_number);

ALTER TABLE airport

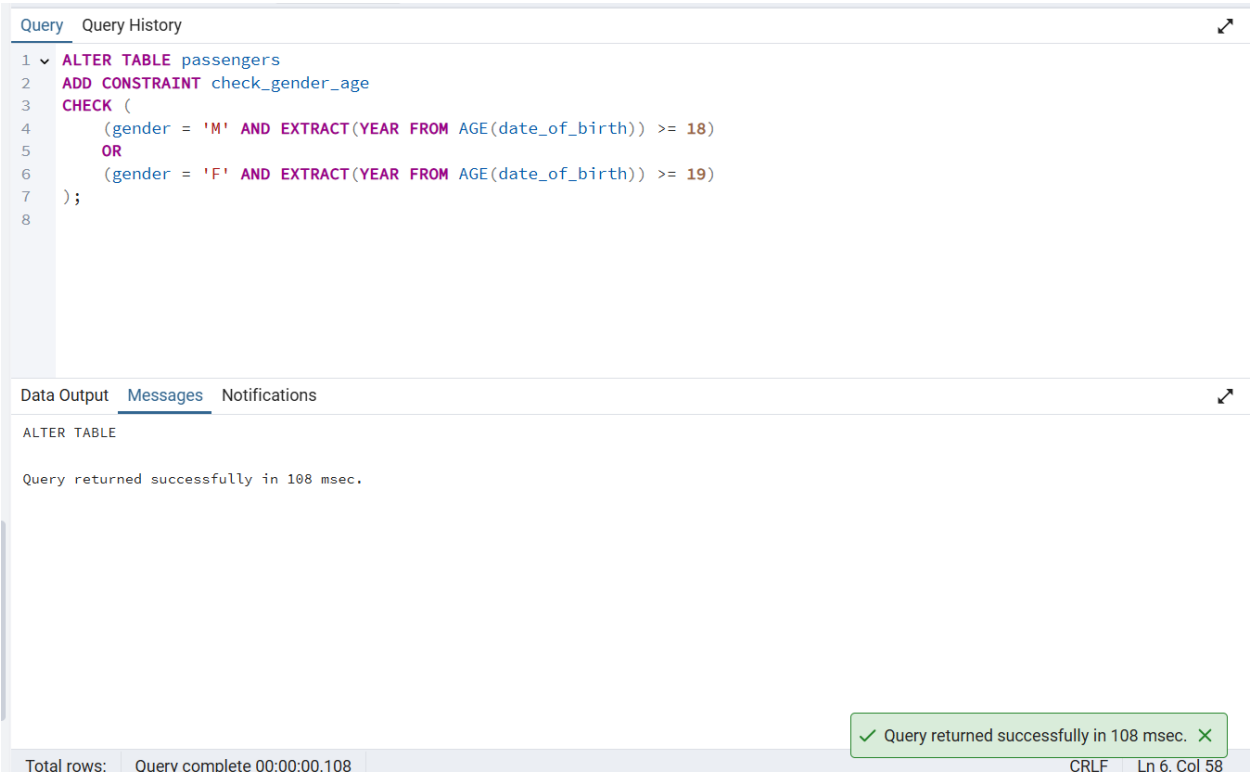
ADD CONSTRAINT unique_airport_id

UNIQUE (airport_id);



6. Add a CHECK constraint to ensure that male passengers must be at least 18 years old and female passengers must be 19 years old.

```
ALTER TABLE passengers
ADD CONSTRAINT check_gender_age
CHECK (
   (gender = 'M' AND EXTRACT(YEAR FROM AGE(date_of_birth)) >= 18)
   OR
   (gender = 'F' AND EXTRACT(YEAR FROM AGE(date_of_birth)) >= 19)
);
```



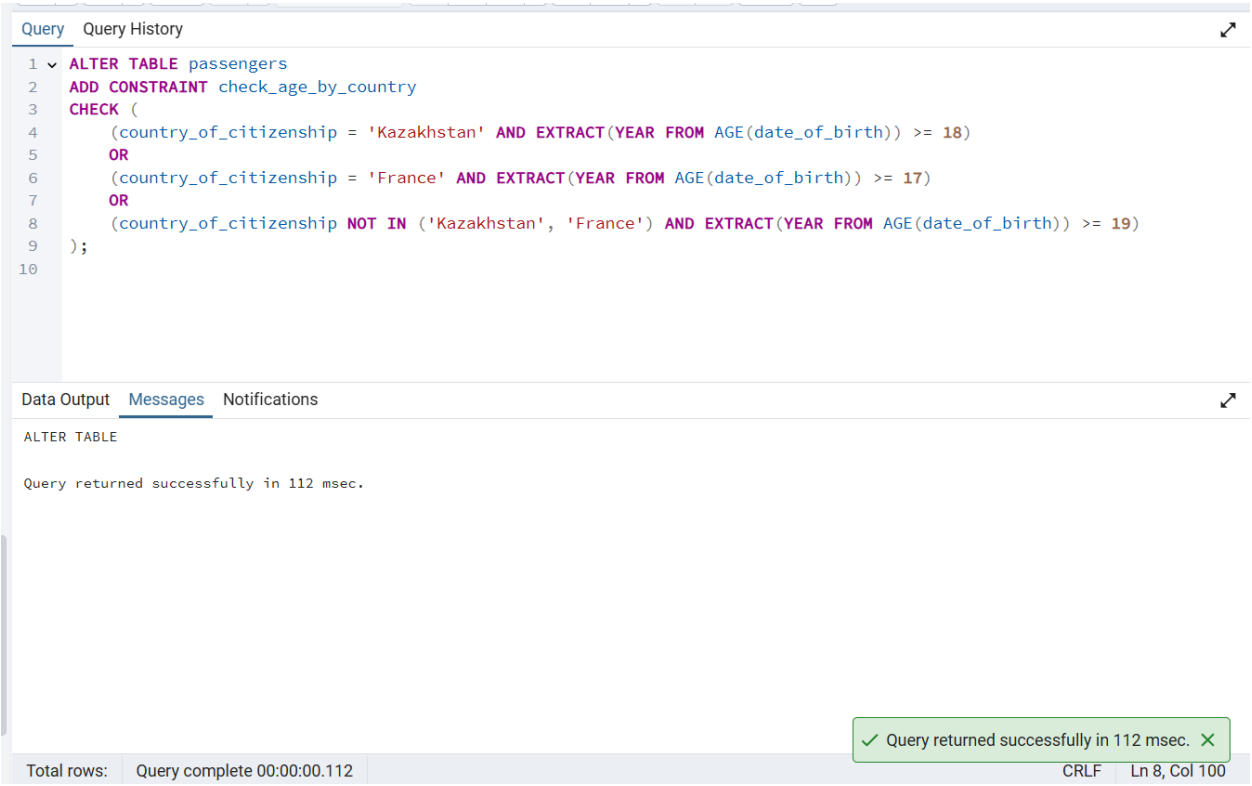
7. Add a CHECK constraint to add rule as follow (use column country_of_citizenship):

· Passengers from Kazakhstan must be at least 18 years old.

· Passengers from France must be at least 17 years old.

· Passengers from other countries must be at least 19 years old.

```
ALTER TABLE passengers

ADD CONSTRAINT check_age_by_country

CHECK (

    (country_of_citizenship = 'Kazakhstan' AND EXTRACT(YEAR FROM AGE(date_of_birth)) >= 18)

    OR

    (country_of_citizenship = 'France' AND EXTRACT(YEAR FROM AGE(date_of_birth)) >= 17)

    OR

    (country_of_citizenship NOT IN ('Kazakhstan', 'France') AND EXTRACT(YEAR FROM AGE(date_of_birth)) >= 19));
```



8. Add a ticket_discount column to table booking and a CHECK constraint to apply some discount based on ticket price and created time:

· the constraint applies a 5% discount for tickets created after 2024-01-01,

and 10% discount for tickets created before 2024-01-01.

```
ALTER TABLE booking

ADD COLUMN ticket_discount numeric;


ALTER TABLE booking

ADD CONSTRAINT check_ticket_discount

CHECK (

    (created_at >= '2024-01-01' AND ticket_discount = ticket_price * 0.05)

    OR

    (created_at < '2024-01-01' AND ticket_discount = ticket_price * 0.10)

);
```

Query | Query History

```sql
ALTER TABLE booking
ADD COLUMN ticket_discount numeric;

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

Data Output | Messages | Notifications

```
ALTER TABLE

Query returned successfully in 172 msec.
```

Query returned successfully in 172 msec.

Total rows: | Query complete 00:00:00.172 | CRLF | Ln 9, Col 66