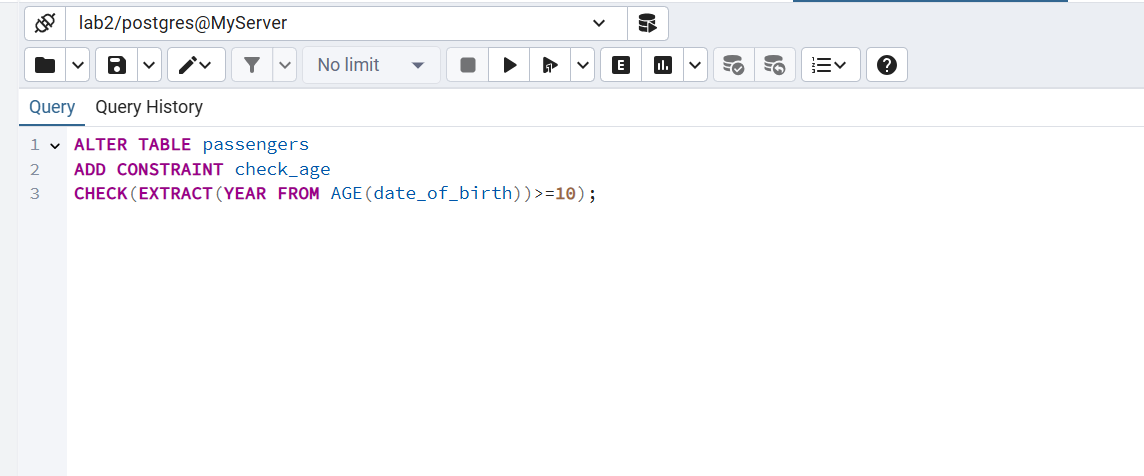
**Abdykamat Adilet lab5 . DATABASES**

**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);

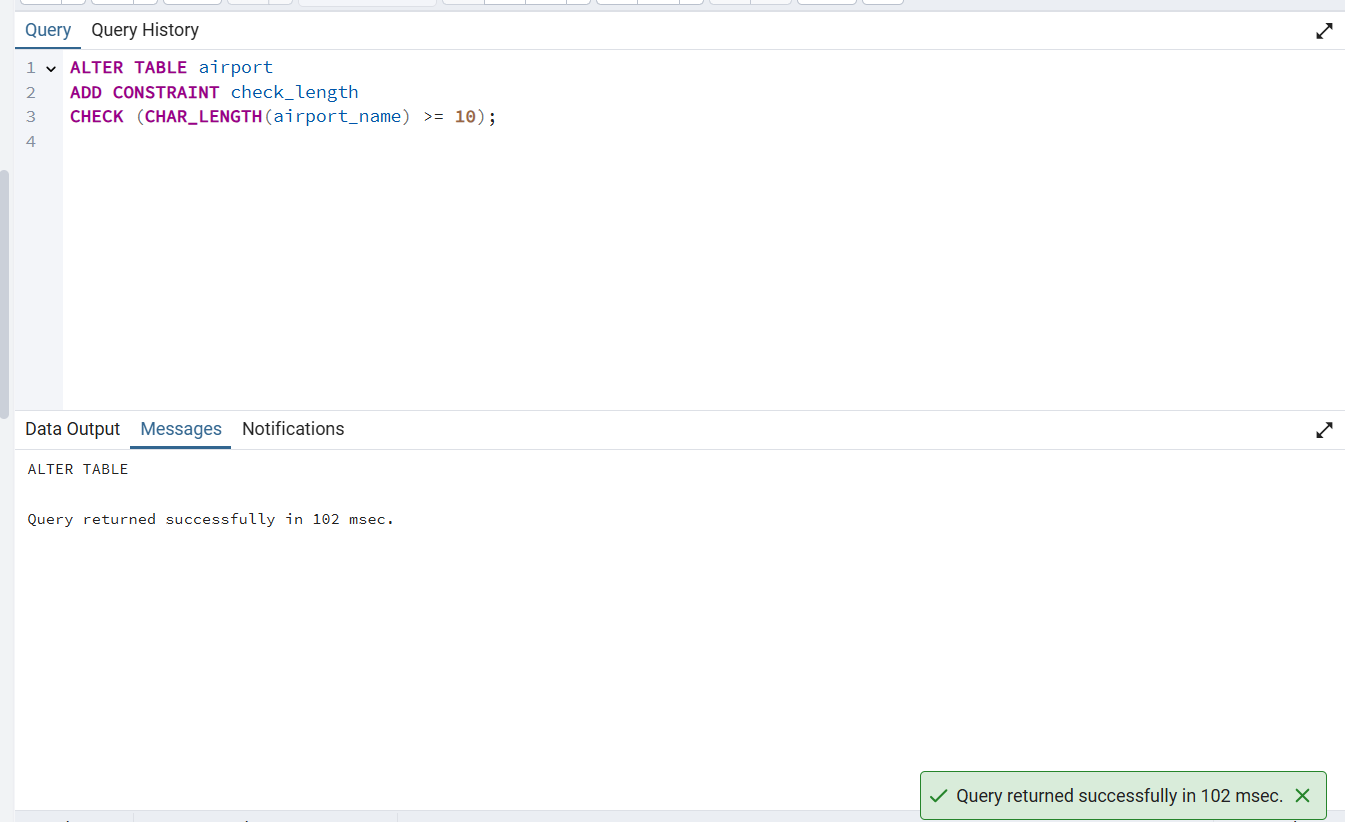


**4. Add a CHECK constraint to ensure that all values in airport\_name must have at least 10 characters.**

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

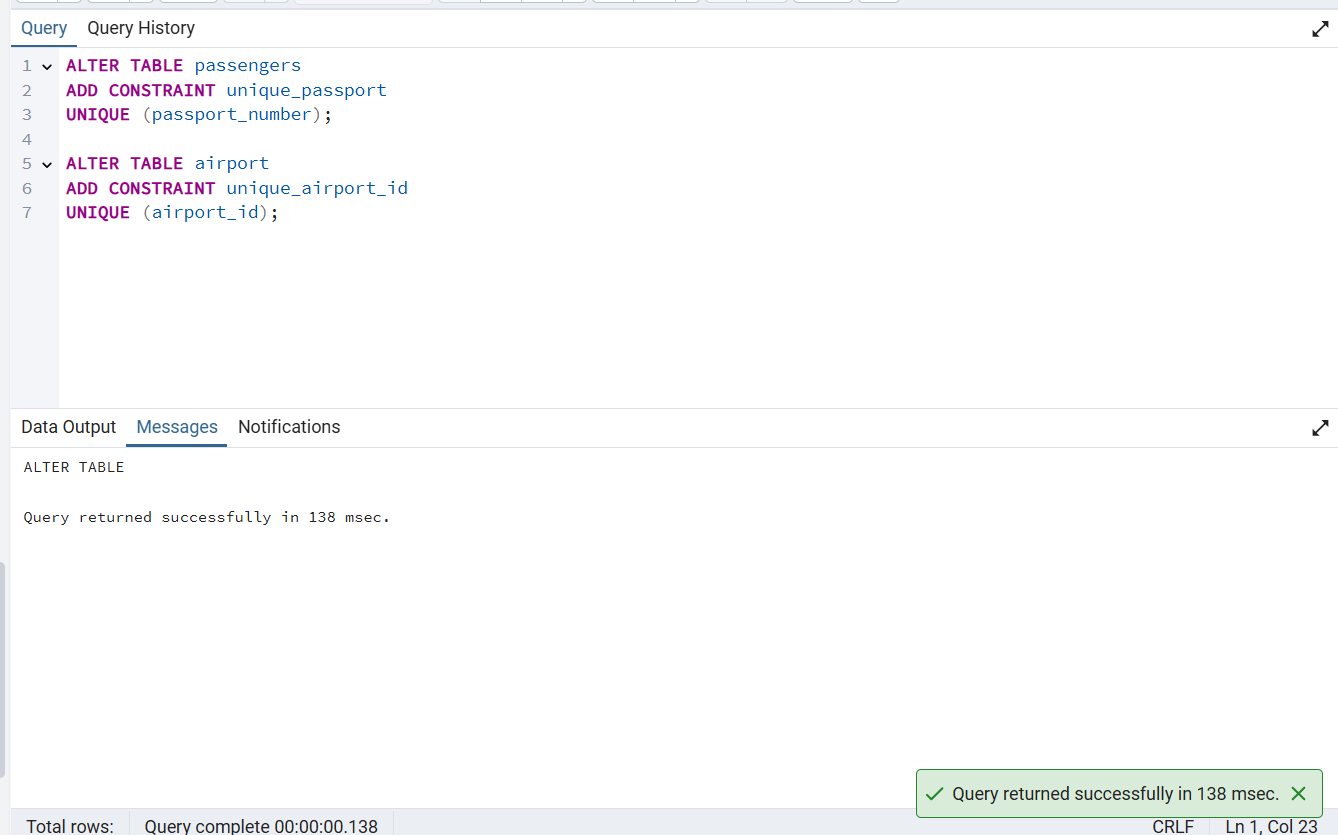
ADD CONSTRAINT unique\_passport

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

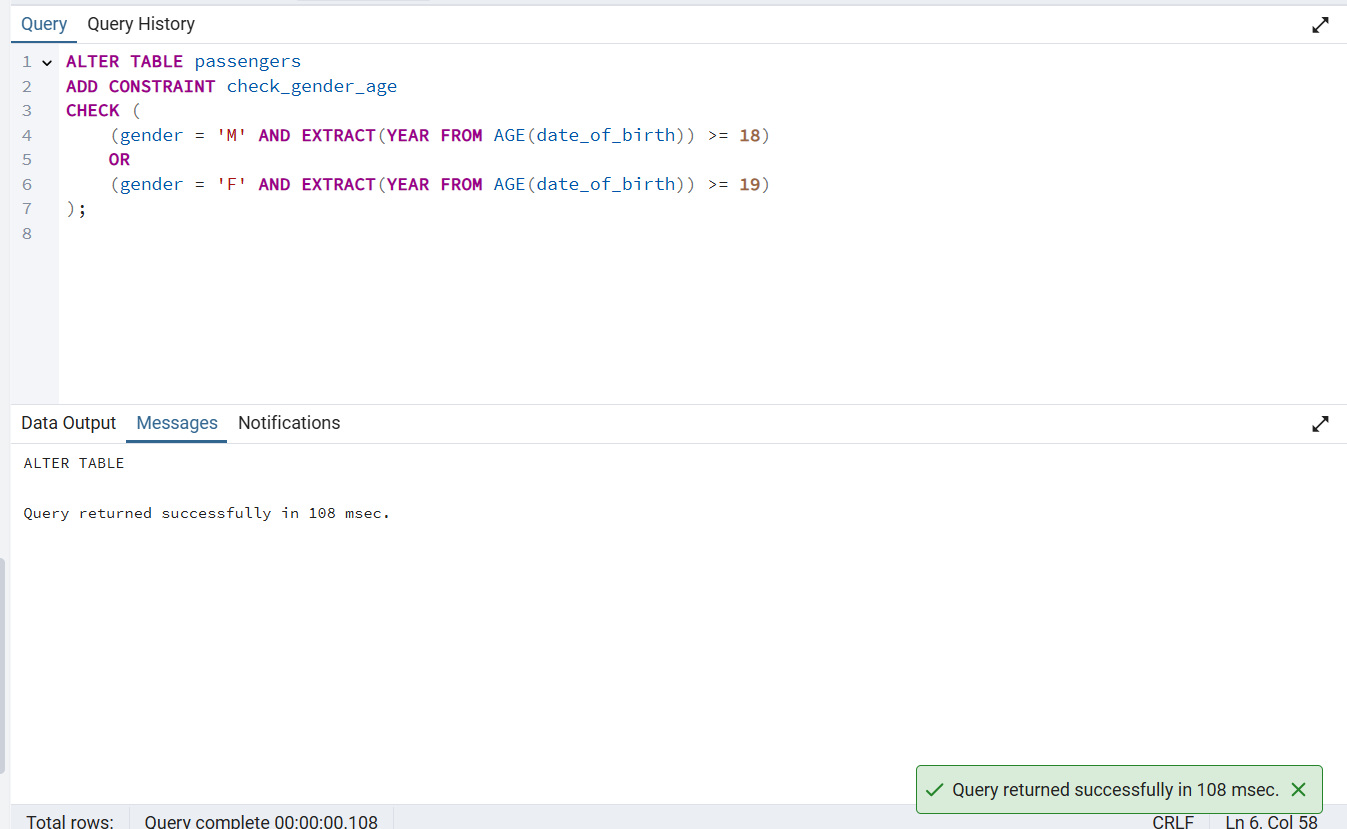
CHECK (

(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 (

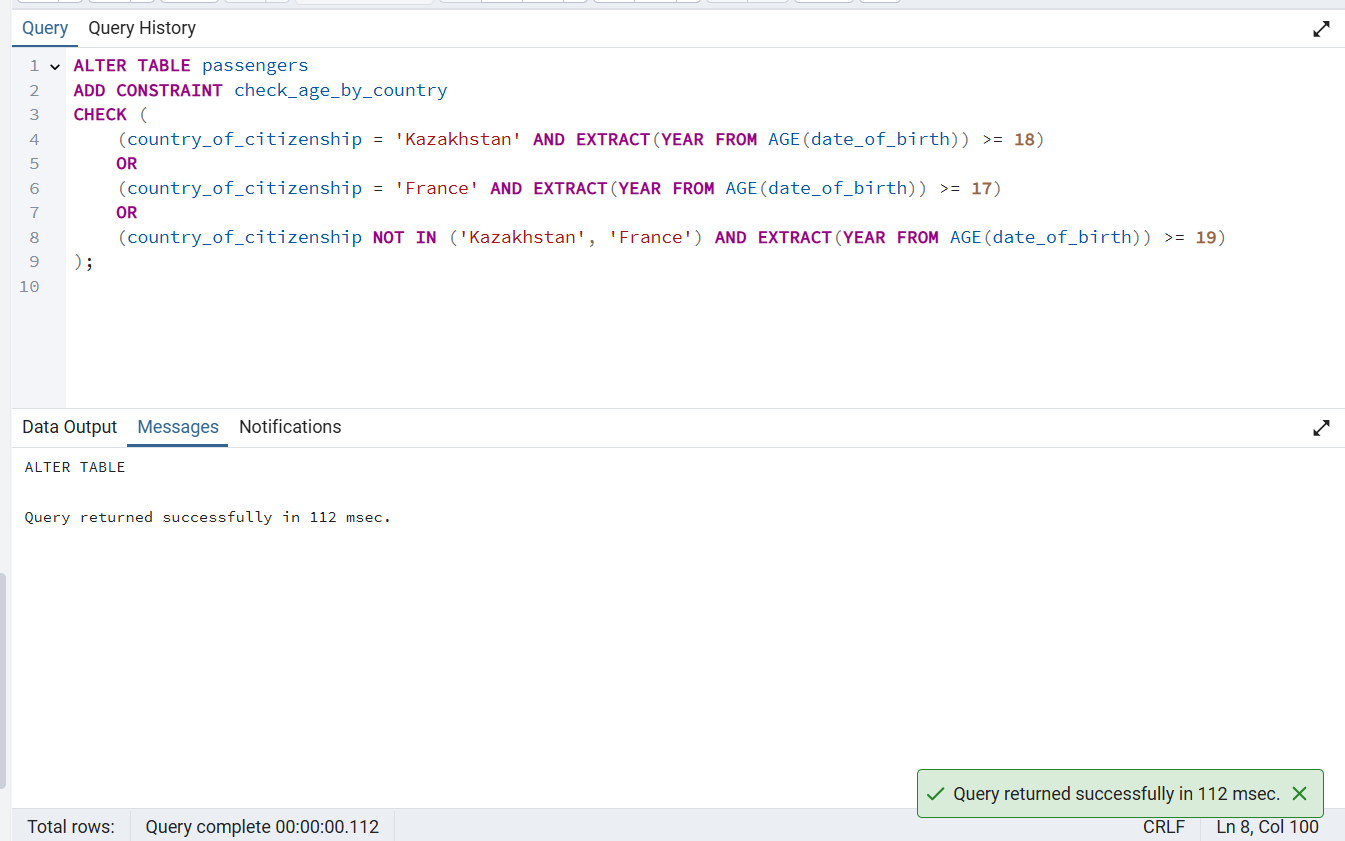
(country\_of\_citizenship = 'Kazakhstan' AND EXTRACT(YEAR FROM AGE(date\_of\_birth)) >= 18)

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

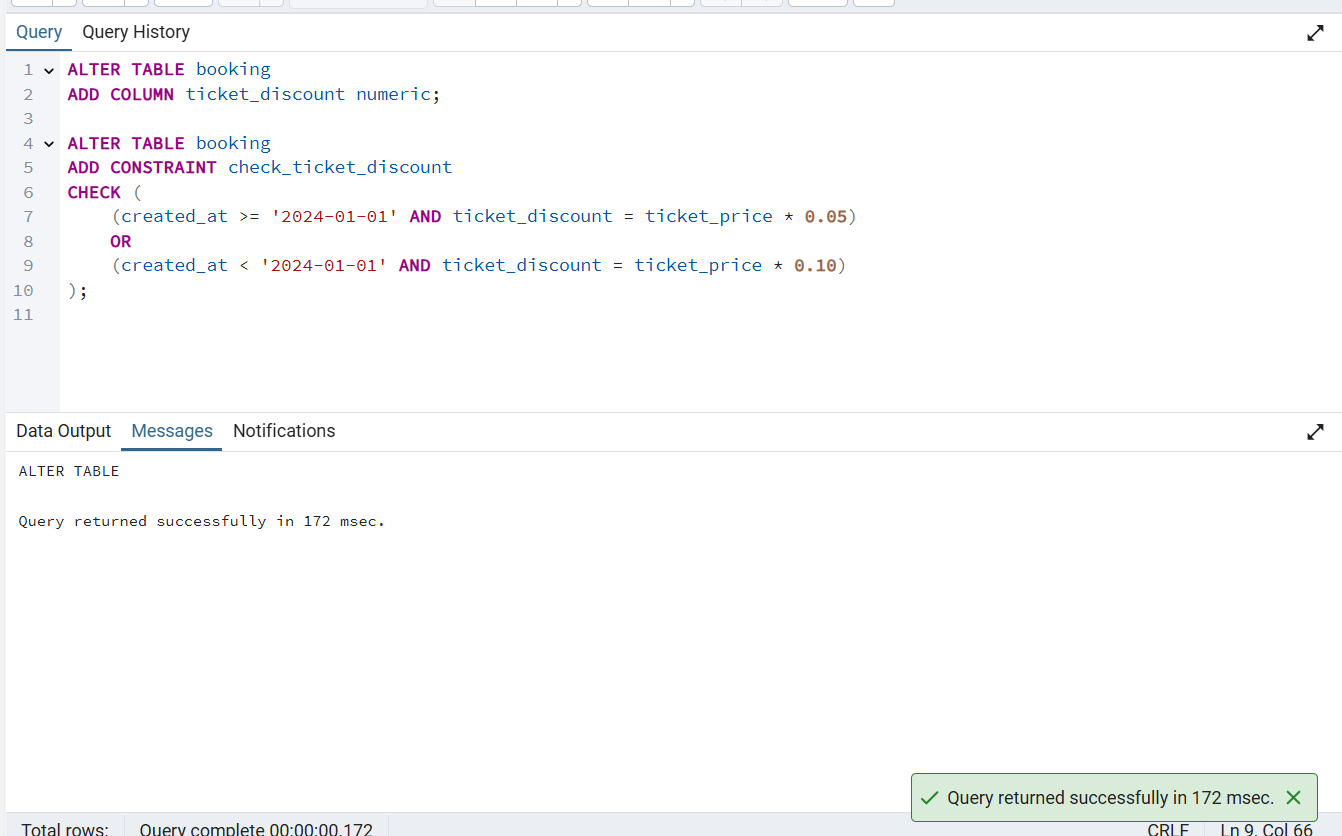
CHECK (

(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)

);

****