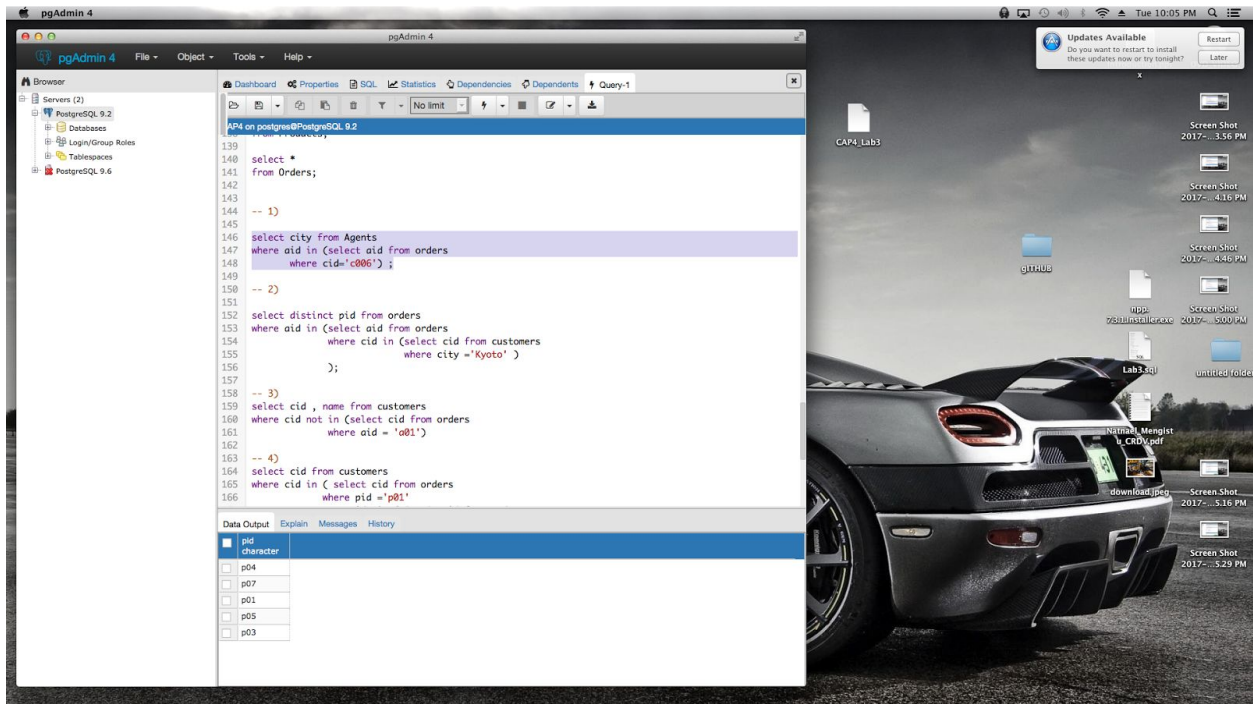
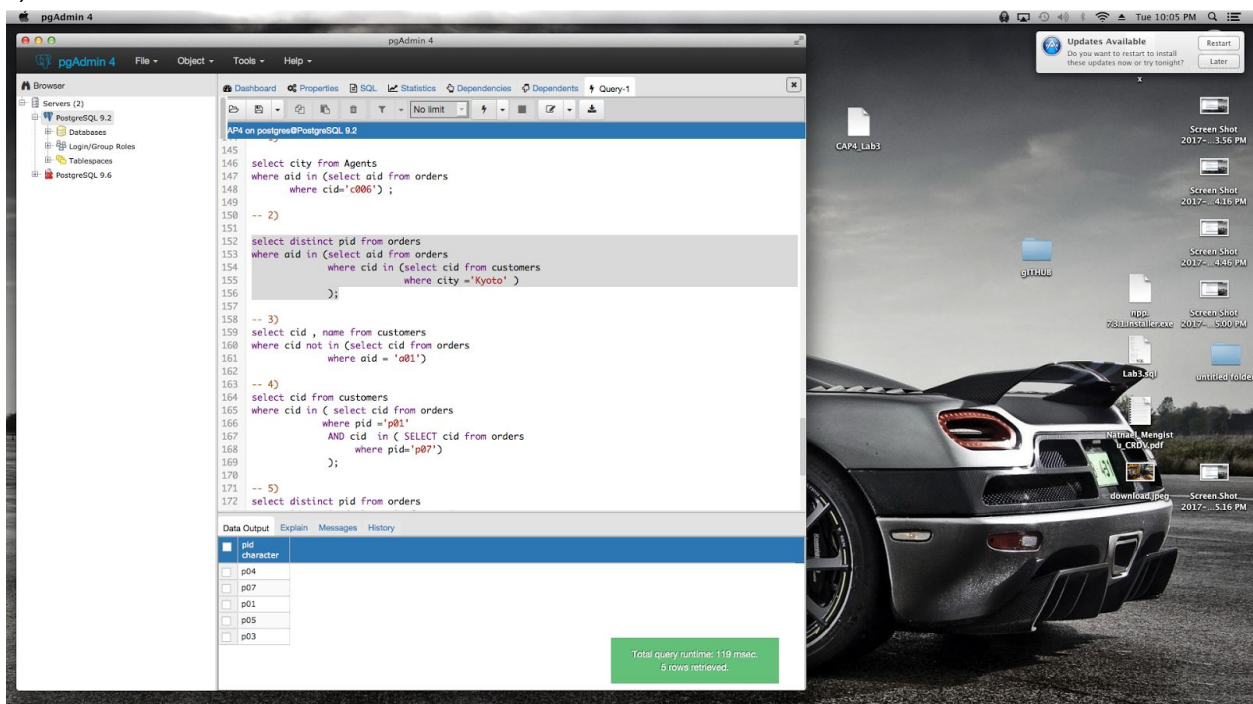


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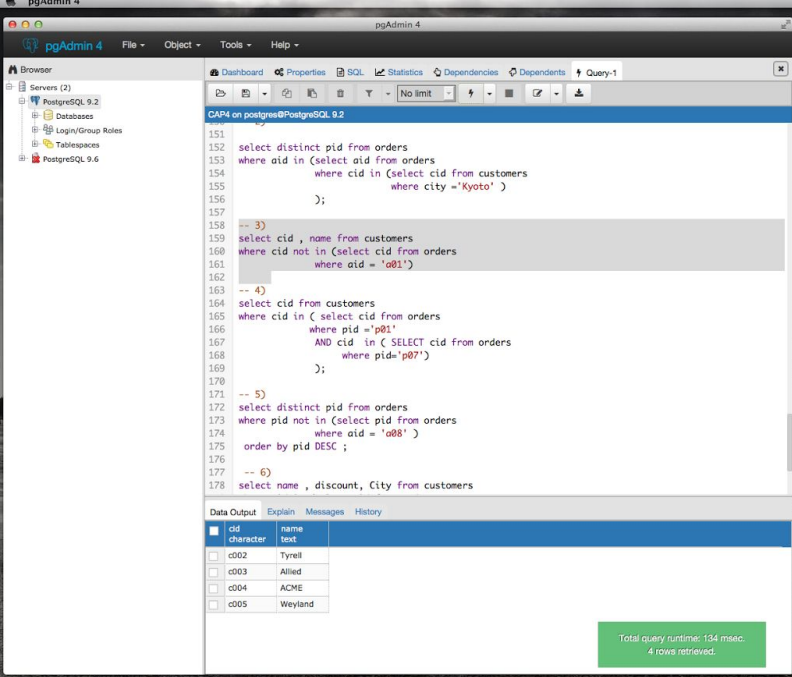
1)



2)



3)



The screenshot shows the pgAdmin 4 interface with a SQL query executed. The query is as follows:

```

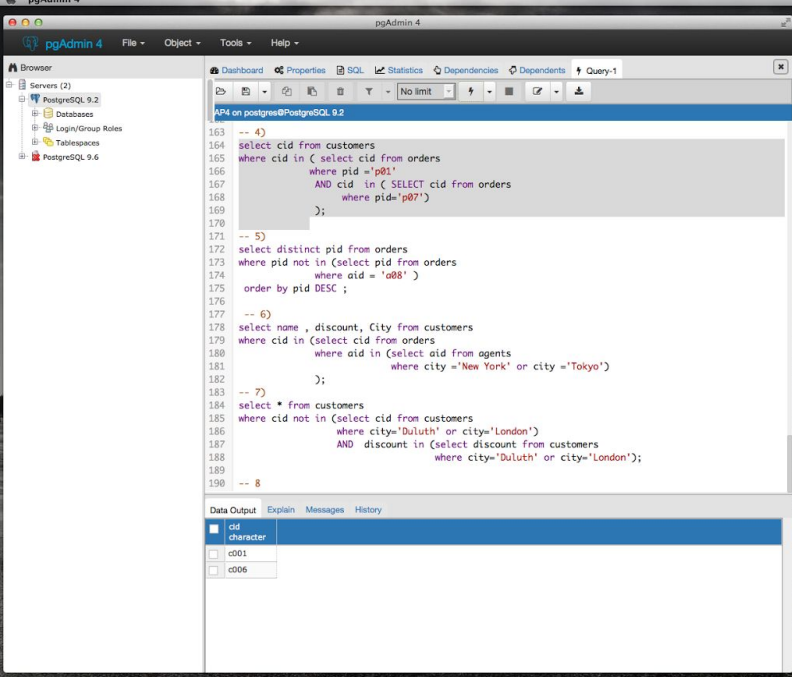
151 select distinct pid from orders
152 where aid in (select aid from orders
153              where cid in (select cid from customers
154                           where city = 'Kyoto' )
155              );
156
157 -- 3)
158 select cid , name from customers
159 where cid not in (select cid from orders
160                  where aid = 'a081')
161
162 -- 4)
163 select cid from customers
164 where cid in ( select cid from orders
165               where pid = 'p01'
166               AND cid in ( SELECT cid from orders
167                           where pid='p07' )
168               );
169
170 -- 5)
171 select distinct pid from orders
172 where pid not in (select pid from orders
173                  where aid = 'a088' )
174 order by pid DESC ;
175
176 -- 6)
177 select name , discount, City from customers
178
179 Total query runtime: 134 msec.
180 4 rows retrieved.

```

The Data Output table shows the following results:

cid	name
c002	Tynell
c003	Allied
c004	ACME
c005	Weyland

4)



The screenshot shows the pgAdmin 4 interface with a SQL query executed. The query is as follows:

```

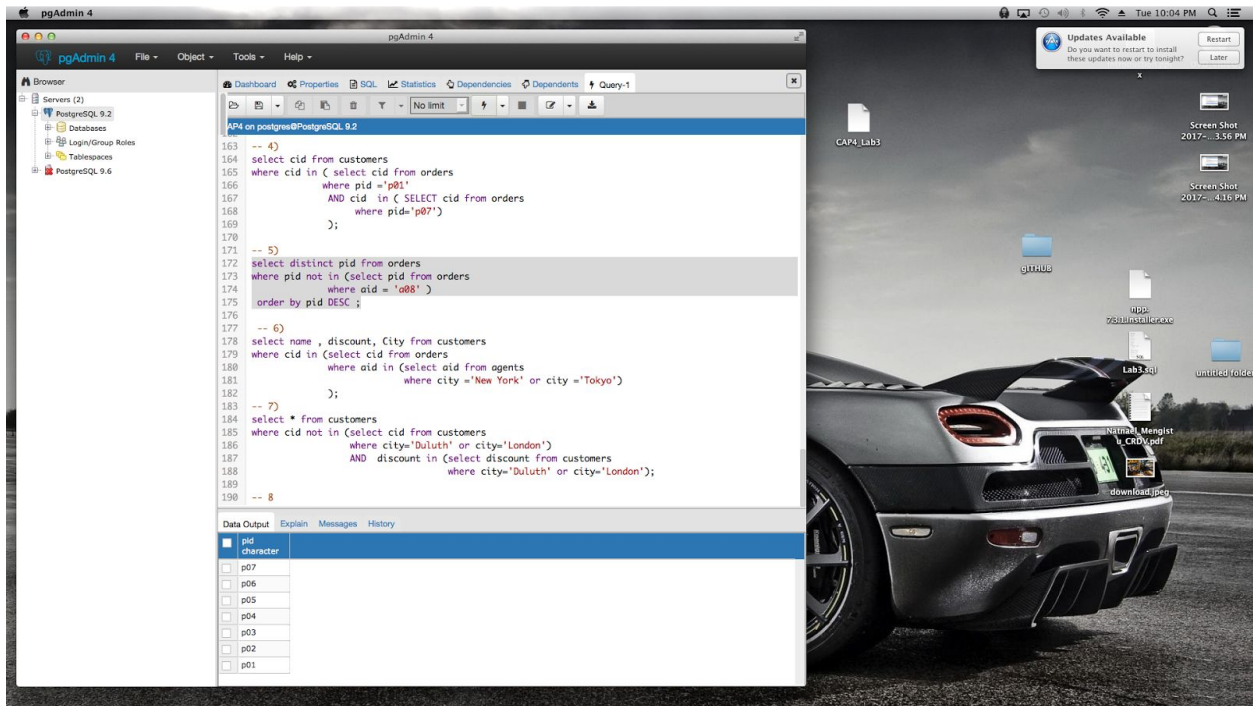
163 -- 4)
164 select cid from customers
165 where cid in ( select cid from orders
166               where pid = 'p01'
167               AND cid in ( SELECT cid from orders
168                           where pid='p07' )
169               );
170
171 -- 5)
172 select distinct pid from orders
173 where pid not in (select pid from orders
174                  where aid = 'a088' )
175 order by pid DESC ;
176
177 -- 6)
178 select name , discount, City from customers
179 where cid in (select cid from orders
180              where aid in (select aid from agents
181                           where city = 'New York' or city = 'Tokyo')
182              );
183
184 -- 7)
185 select * from customers
186 where cid not in (select cid from customers
187                  where city='Duluth' or city='London')
188 AND discount in (select discount from customers
189                  where city='Duluth' or city='London');
190
191 -- 8)

```

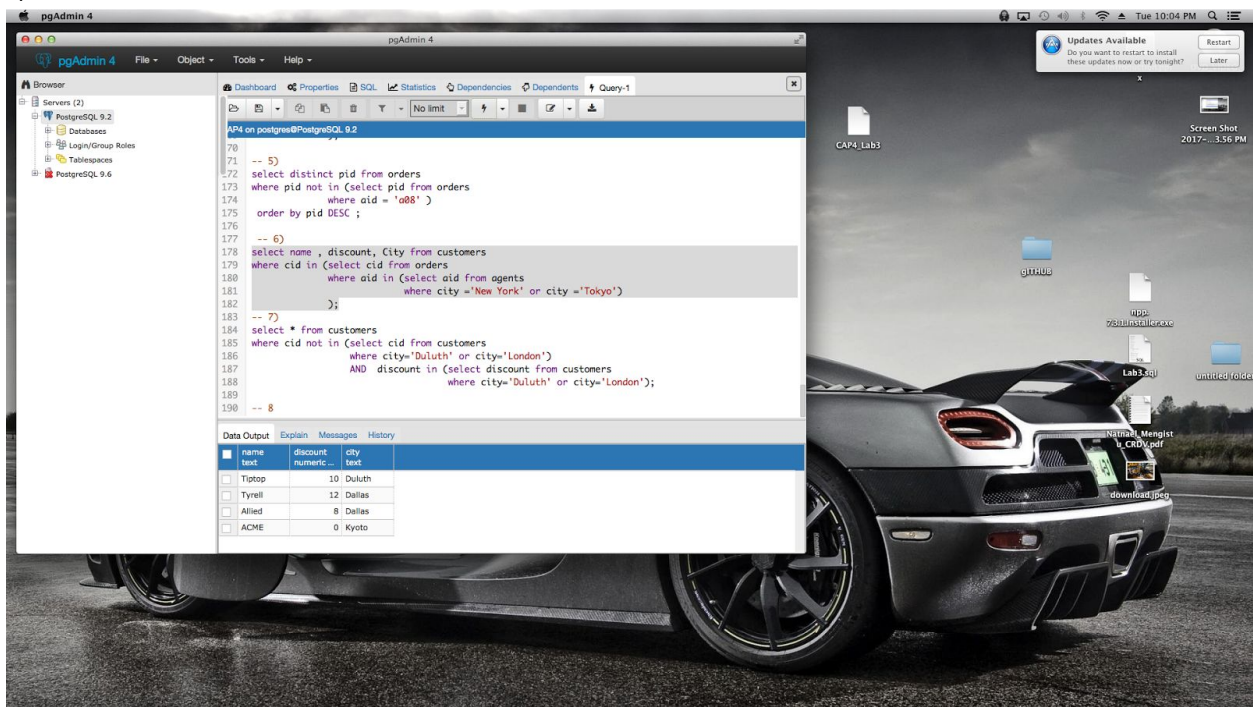
The Data Output table shows the following results:

cid	character
c001	
c006	

5)

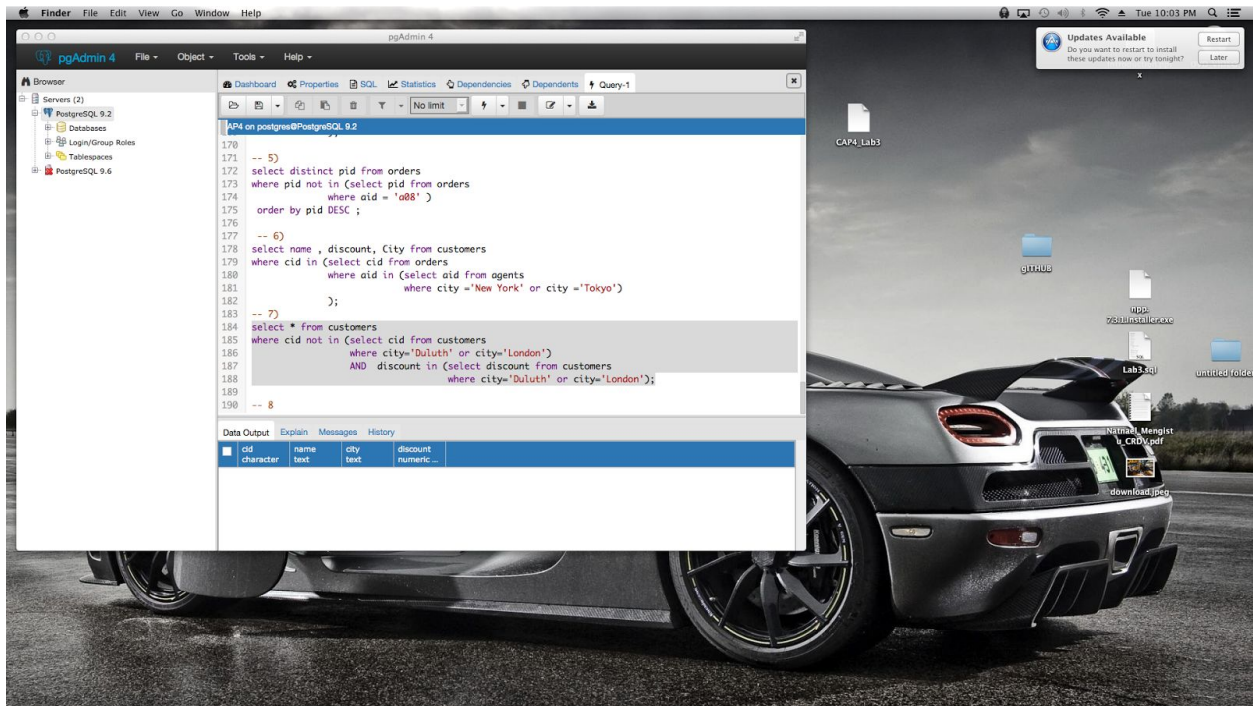


6)



7)





8)

Check constraints are used to enforce domain integrity by limiting the value range that is accepted by the column(s). They use one or more boolean expressions to evaluate the specific conditions that have been met.

- They can be used to ensure the value stored in the column(s) meets a specific condition.

.

Example -

```

CREATE TABLE Customers
(
  Cid int NOT NULL,
  LastName varchar(255) NOT NULL,
  Address varchar(255),
  CHECK (Cid>0)
)

```

On the table we created we define that Cid is an integer by using check constraint.