

# Presto Kurulum Adımları:

1. Northwind veritabanının postgresSQL'e kurulması: Tar dosyası postgres'e restore edildi.

```
postgres@furkan-VirtualBox:~$ pg_restore -U postgres -d test /home/furkan/Downloads/northwind.tar
postgres@furkan-VirtualBox:~$
```

2. Veritabanı içeriği:

The screenshot shows the pgAdmin 4 interface. On the left, the 'Browser' pane displays the database structure, with 'Tables (14)' expanded. The main pane shows a query window with the following SQL query:

```
1 select * from customers;
```

The 'Data Output' pane displays the results of the query in a table format:

	customerid	companyname	contactname	contacttitle	address
1	ALFKJ	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57
2	ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 22
3	ANTON	Antonio Moreno Taqueria	Antonio Moreno	Owner	Mataderos 2312
4	AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.
5	BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8
6	BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57
7	BLOMP	Blondesdssl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber
8	BOLID	Bólido Comidas preparadas	Martin Sommer	Owner	C/ Araquil, 67
9	RONAP	Ron enn'	I. aurence I. eihhan	Owner	17 rue des Rouchers

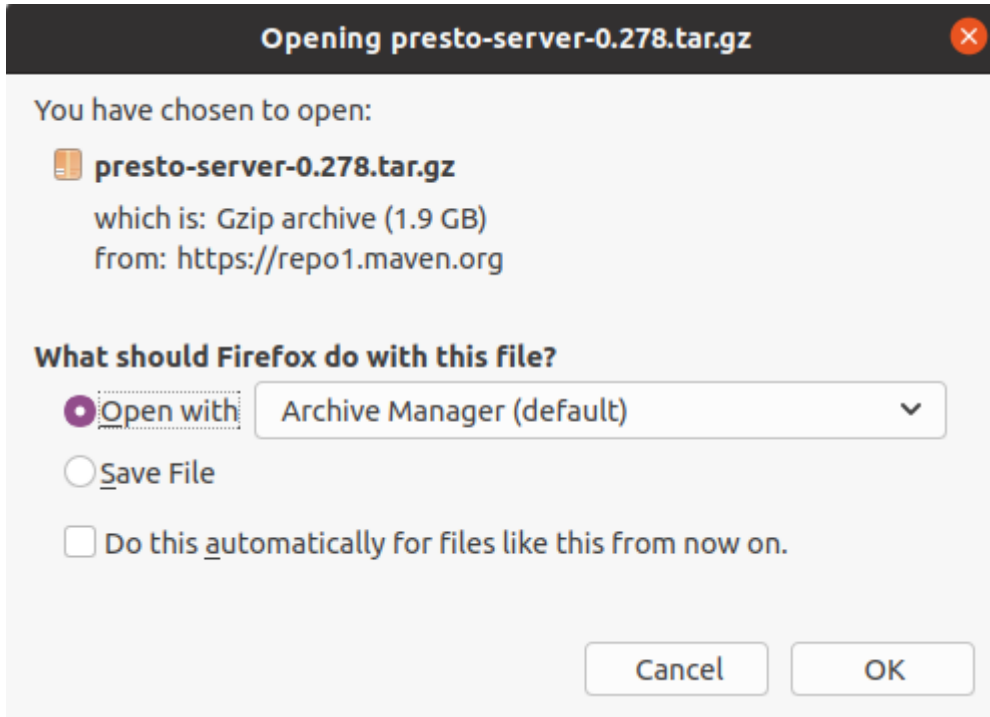
The bottom status bar indicates 'Total rows: 91 of 91' and 'Query complete 00:00:00.244'.

3. Presto'nun çalışabilmesi için Ubuntu'ya Java JDK ve Python yüklendi.

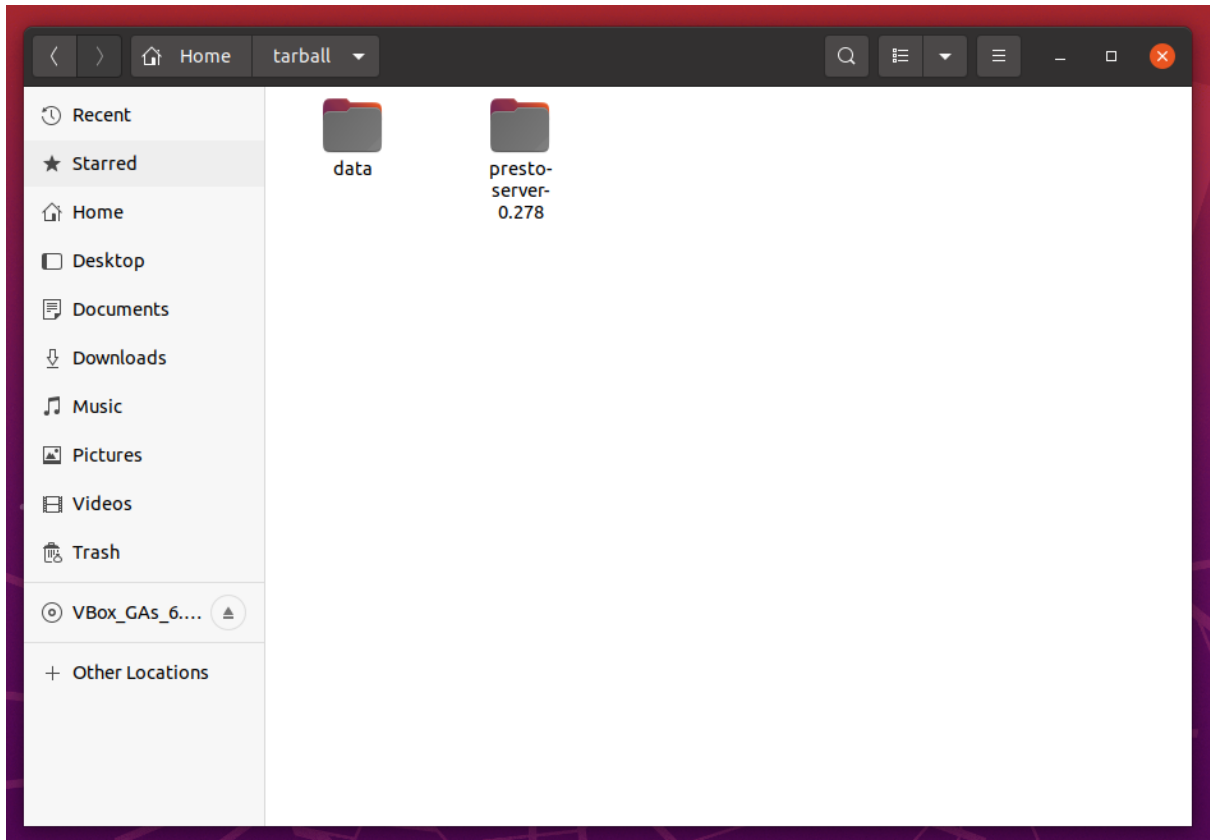
The screenshot shows a terminal window with the following output:

```
furkan@furkan-VirtualBox: ~$ sudo apt-get install python
Reading package lists... Done
Building dependency tree
Reading state information... Done
Note, selecting 'python-is-python2' instead of 'python'
The following additional packages will be installed:
  libpython2.7-minimal libpython2.7-stdlib python2 python2-minimal python2.7 python2.7-minimal
Suggested packages:
  python2-doc python-tk python2.7-doc binutils binfmt-support
The following NEW packages will be installed:
  libpython2.7-minimal libpython2.7-stdlib python-is-python2 python2 python2-minimal python2.7
  python2.7-minimal
0 upgraded, 8 newly installed, 0 to remove and 295 not upgraded.
Need to get 3.815 kB of archives.
After this operation, 16,5 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://tr.archive.ubuntu.com/ubuntu focal-updates/universe amd64 libpython2.7-minimal amd64 2.7.18-1-20.04.3 [336 kB]
Get:2 http://tr.archive.ubuntu.com/ubuntu focal-updates/universe amd64 python2.7-minimal amd64 2.7.18-1-20.04.3 [1.280 kB]
Get:3 http://tr.archive.ubuntu.com/ubuntu focal/universe amd64 python2-minimal amd64 2.7.17-2ubuntu4 [27,5 kB]
Get:4 http://tr.archive.ubuntu.com/ubuntu focal-updates/universe amd64 libpython2.7-stdlib amd64 2.7.18-1-20.04.3 [1.888 kB]
Get:5 http://tr.archive.ubuntu.com/ubuntu focal-updates/universe amd64 python2.7 amd64 2.7.18-1-20.04.3 [248 kB]
```

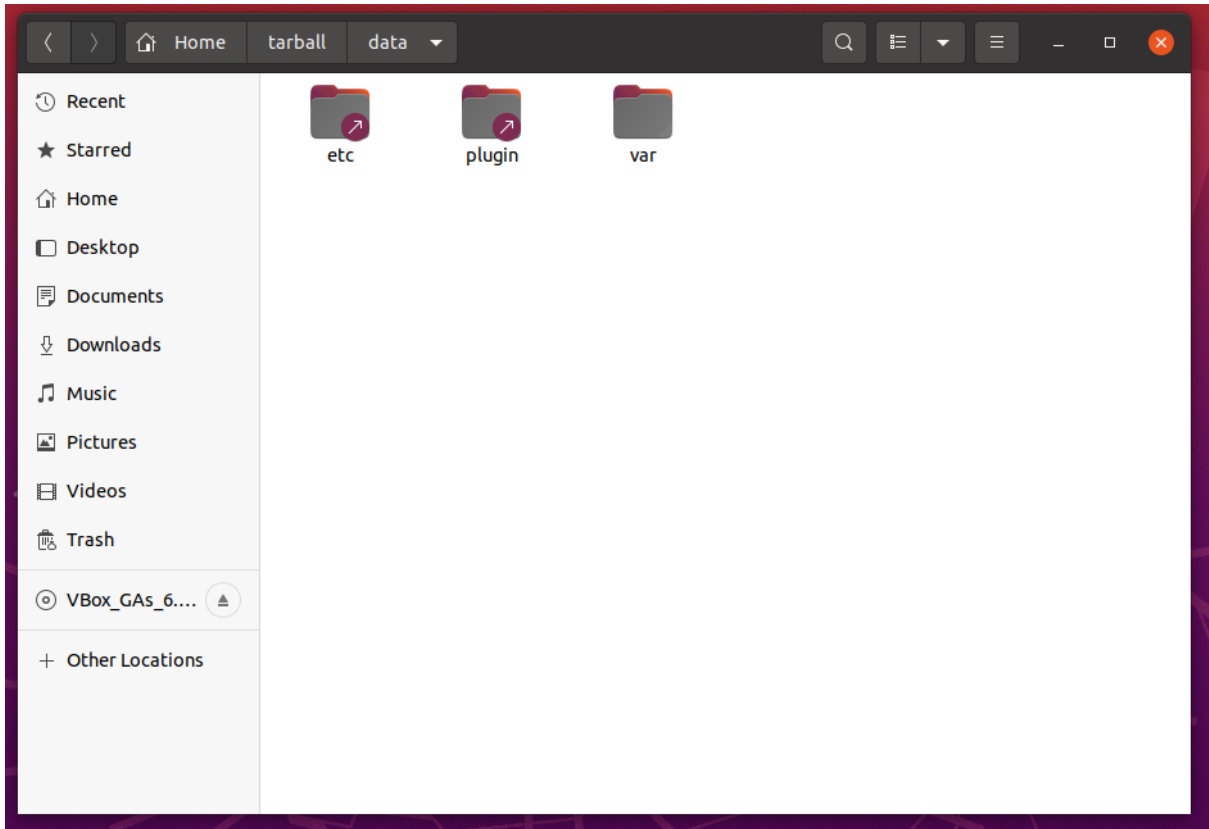
4. prestodb.io dökümantasyonunda belirtilen kurulumun ilk adımı olan “[presto-server-0.278.tar.gz](https://repo1.maven.org/maven2/org/prestodb/presto-server/0.278/presto-server-0.278.tar.gz)” dosyası indirildi ve içerik boş bir dosya dizinine çıkarıldı.



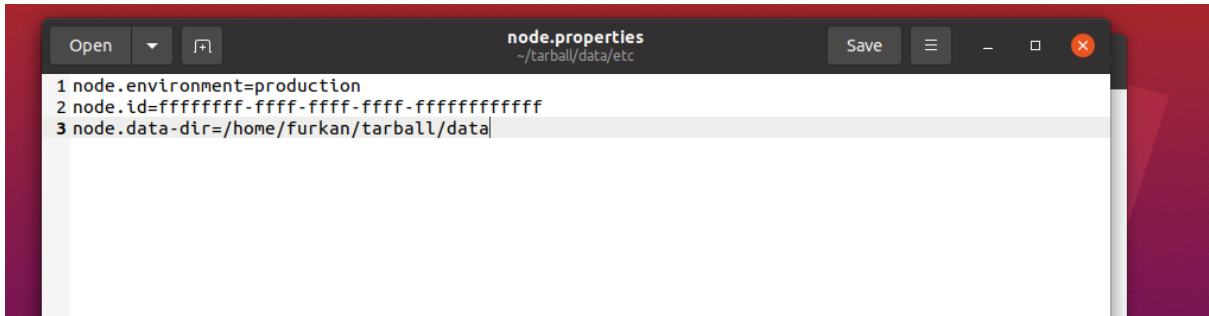
5. Server çalışırken log dosyalarının yükleneceği data dosyası oluşturuldu.



6. Gerekli konfigürasyon dosyalarının içeriğinin saklanacağı etc dosyası oluşturuldu.



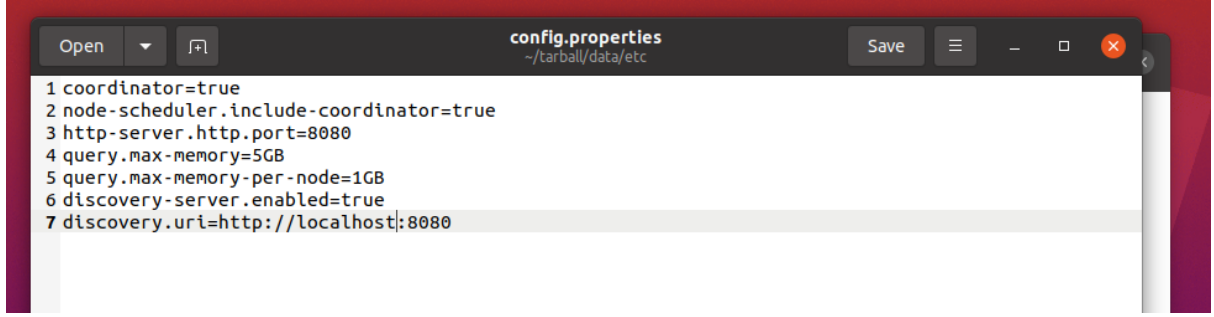
7. Düğüme özgü içerikleri içeren node.properties konfigürasyon dosyası oluşturuldu.



8. Java Virtual Machine başlatan kodları içeren jvm.config dosyası oluşturuldu.

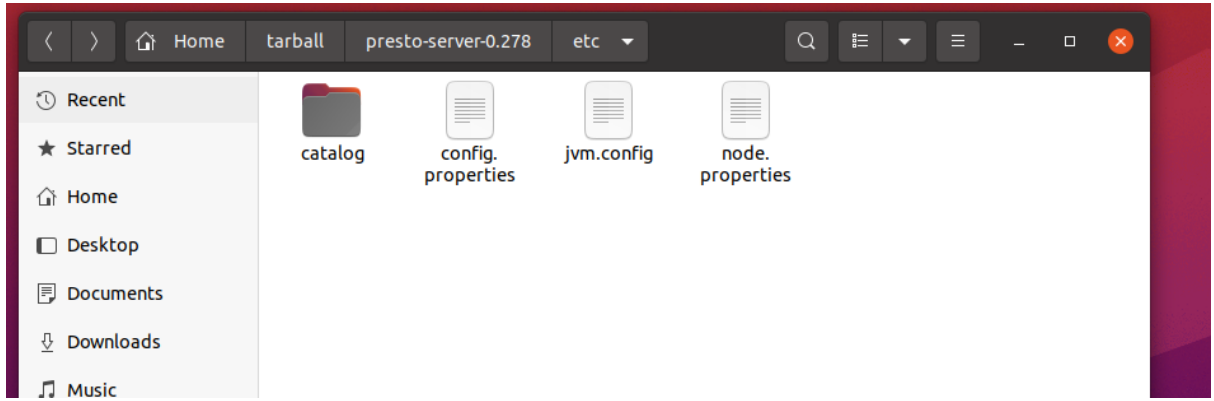


9. Server'in üzerinde çalıştığı sanal makinenin hem coordinator hem de worker olarak işlev görmesi için config.properties dosyasının içeriği aşağıdaki gibi oluşturuldu.

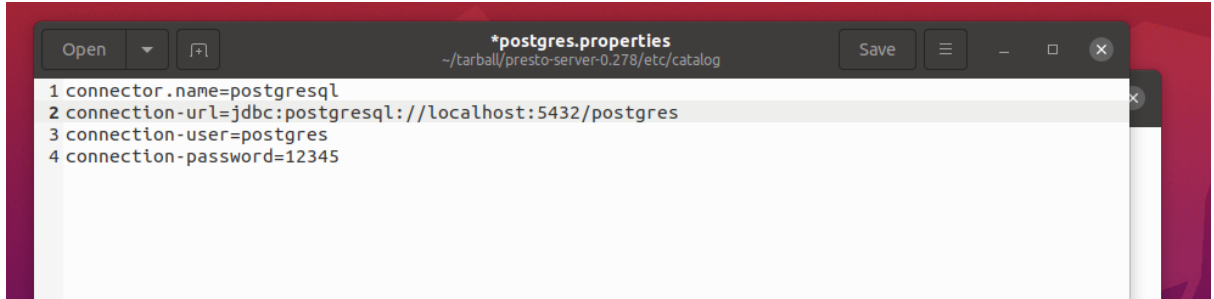


```
1 coordinator=true
2 node-scheduler.include-coordinator=true
3 http-server.http.port=8080
4 query.max-memory=5GB
5 query.max-memory-per-node=1GB
6 discovery-server.enabled=true
7 discovery.uri=http://localhost:8080
```

10. İçeriğinde connector dosyalarını bulunduracak catalog dosyası oluşturuldu.

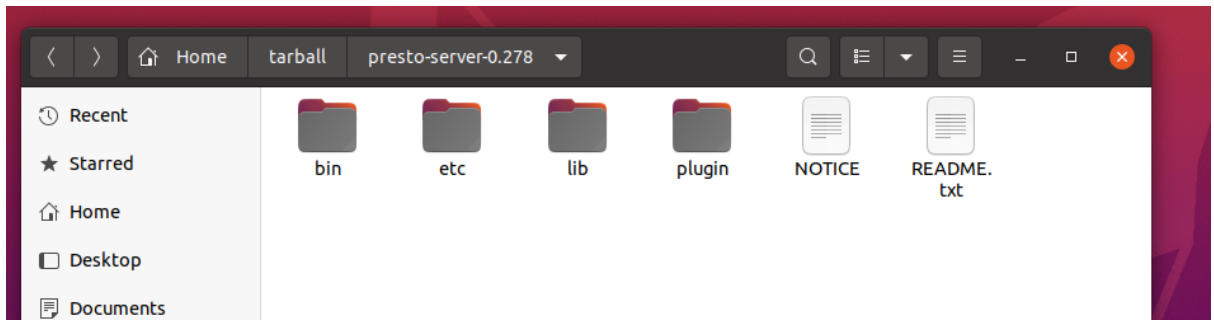


11. Catalog dosyanın içine postgres veritabanıyla bağlantı kurmasını sağlayacak postgres.properties dosyası oluşturuldu.

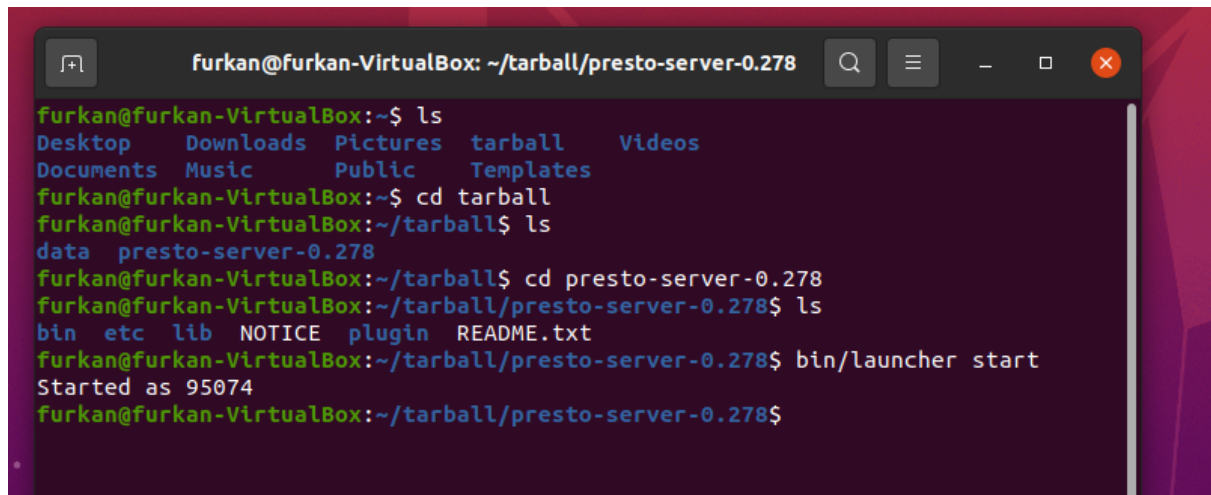


```
1 connector.name=postgresql
2 connection-url=jdbc:postgresql://localhost:5432/postgres
3 connection-user=postgres
4 connection-password=12345
```

12. presto-server-0.278 dosyasının son hali.

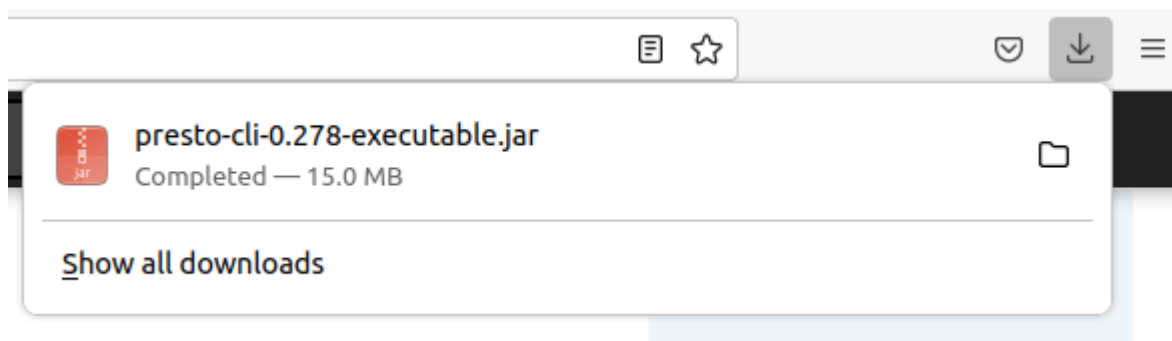


13. Terminalden presto server “bin/launcher start” komutu ile ayağa kaldırıldı.

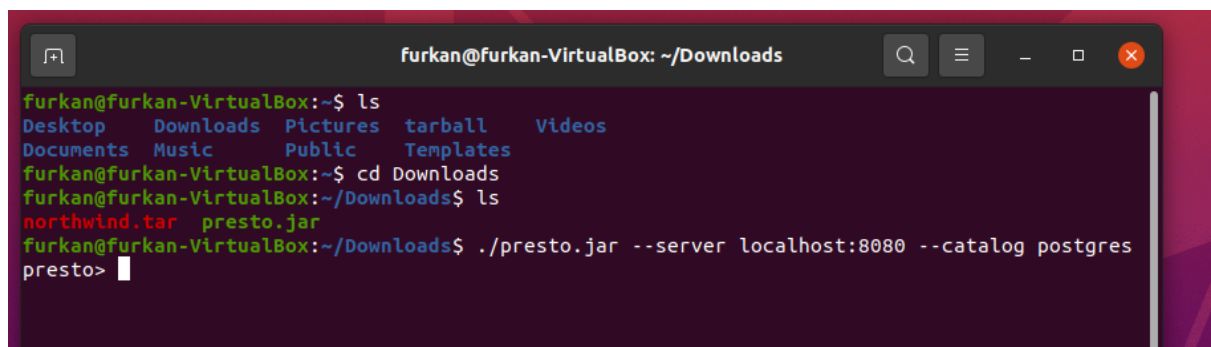


```
furkan@furkan-VirtualBox: ~/tarball/presto-server-0.278
furkan@furkan-VirtualBox:~$ ls
Desktop  Downloads  Pictures  tarball  Videos
Documents Music      Public   Templates
furkan@furkan-VirtualBox:~$ cd tarball
furkan@furkan-VirtualBox:~/tarball$ ls
data  presto-server-0.278
furkan@furkan-VirtualBox:~/tarball$ cd presto-server-0.278
furkan@furkan-VirtualBox:~/tarball/presto-server-0.278$ ls
bin  etc  lib  NOTICE  plugin  README.txt
furkan@furkan-VirtualBox:~/tarball/presto-server-0.278$ bin/launcher start
Started as 95074
furkan@furkan-VirtualBox:~/tarball/presto-server-0.278$
```

14. CLI üzerinden sorgu SQL sorguları atabilmek için “[presto-cli-0.278-executable.jar](#)” dosyası indirildi.



15. Dosya “chmod +x” komutu ile çalıştırılabilir hale getirildikten sonra “./presto.jar --server localhost:8080 --catalog postgres” komutu ile çalıştırıldı.



```
furkan@furkan-VirtualBox: ~/Downloads
furkan@furkan-VirtualBox:~$ ls
Desktop  Downloads  Pictures  tarball  Videos
Documents Music      Public   Templates
furkan@furkan-VirtualBox:~$ cd Downloads
furkan@furkan-VirtualBox:~/Downloads$ ls
northwind.tar  presto.jar
furkan@furkan-VirtualBox:~/Downloads$ ./presto.jar --server localhost:8080 --catalog postgres
presto>
```

16. CLI üzerinden servera gönderilen, veritabanına ait tabloları listeleyen örnek sorgu.

```
furkan@furkan-VirtualBox: ~/Downloads
presto> show tables from postgres.public;
      Table
-----
categories
customercustomerdemo
customerdemographics
customers
employees
employeeterritories
order_details
orders
products
region
shippers
suppliers
territories
usstates
(14 rows)

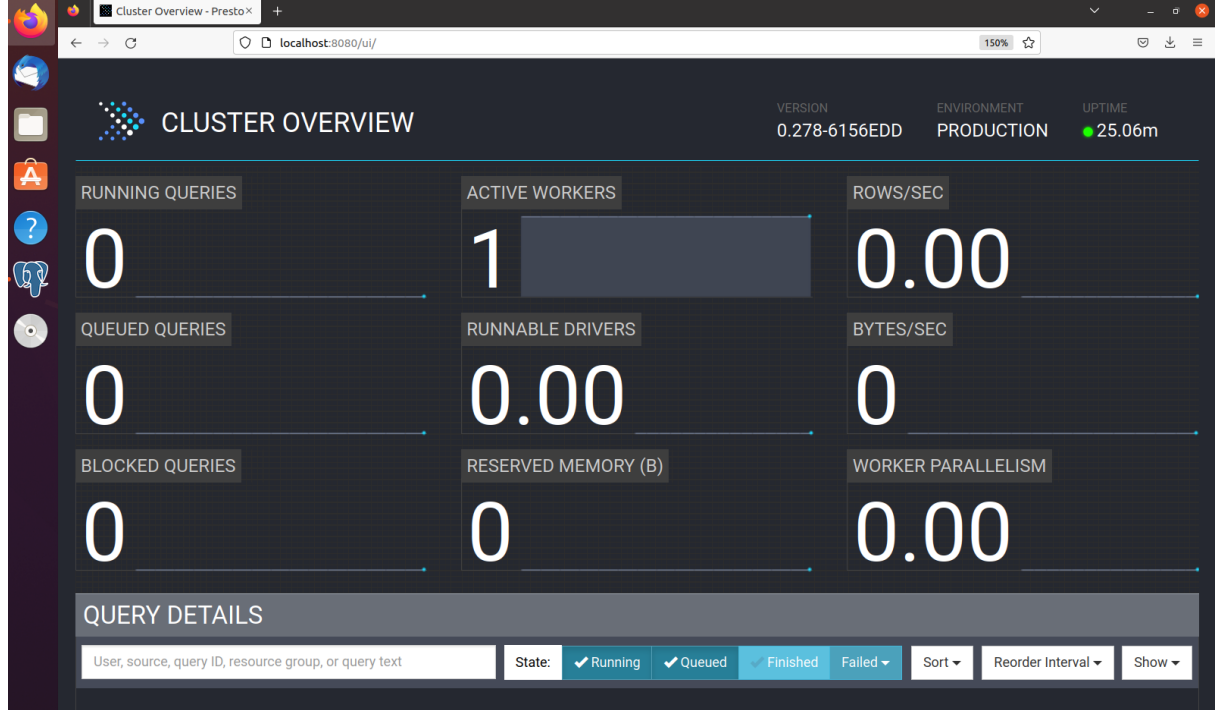
Query 20221204_160222_00001_86bnz, FINISHED, 1 node
Splits: 19 total, 19 done (100.00%)
0:06 [14 rows, 380B] [2 rows/s, 63B/s]

presto>
```

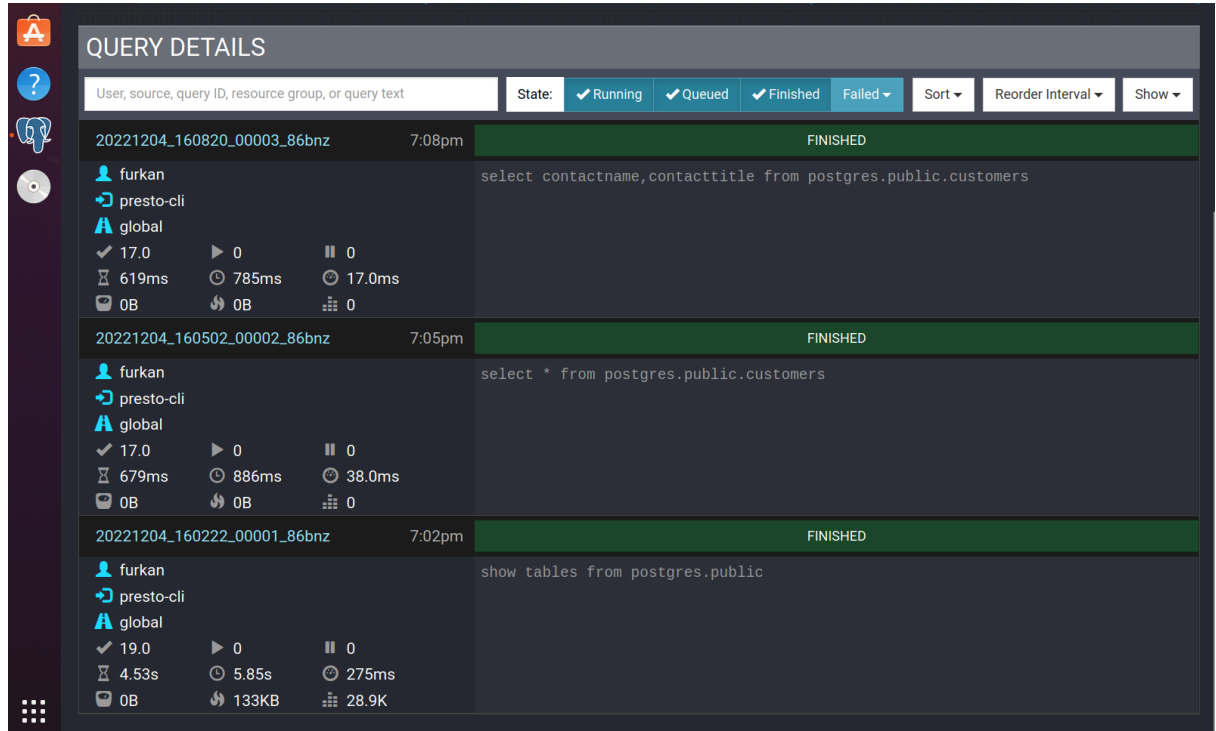
17. Postgres veritabanındaki customer tablosuna contactname ile contacttitle alanlarına göre atılan örnek sorgu.

```
furkan@furkan-VirtualBox: ~/Downloads
presto> select contactname,contacttitle from postgres.public.customers;
      contactname      |      contacttitle
-----+-----
Maria Anders          | Sales Representative
Ana Trujillo           | Owner
Antonio Moreno        | Owner
Thomas Hardy          | Sales Representative
Christina Berglund    | Order Administrator
Hanna Moos            | Sales Representative
Frédérique Citeaux    | Marketing Manager
Martin Sommer        | Owner
Laurence Lebihan      | Owner
Elizabeth Lincoln     | Accounting Manager
Victoria Ashworth     | Sales Representative
Patricio Simpson      | Sales Agent
Francisco Chang       | Marketing Manager
Yang Wang             | Owner
Pedro Afonso          | Sales Associate
Elizabeth Brown       | Sales Representative
Sven Ottlieb          | Order Administrator
Janine Labrune        | Owner
Ann Devon             | Sales Agent
Roland Mendel         | Sales Manager
Aria Cruz             | Marketing Assistant
```

18. Presto serverine “localhost:8080” adresi ile erişilebilen kullanıcı arayüzü.



19. Server’a atılan sorguların arayüzdeki log kayıtları.





## 20. Atılmış bir sorguya ait detaylı analiz sayfası.

QUERY DETAILS

VERSION  
0.278-6156EDD

ENVIRONMENT  
PRODUCTION

UPTIME  
29.86m

20221204\_160820\_00003\_86bnz

OverviewLive PlanStage PerformanceSplitsJSON

FINISHED

Session

User furkan

Principal

Source presto-cli

Catalog postgres

Schema

Client Address 127.0.0.1

Client Tags

Session Properties

Resource Estimates

Execution

Resource Group global

Submission Time 2022-12-04 7:08pm

Completion Time 2022-12-04 7:08pm

Elapsed Time 784.67ms

Prerequisites Wait Time 24.76ms

Queued Time 18.73ms

Planning Time 139.10ms

Execution Time 619.07ms

Coordinator 10.0.2.15

Query

select contactname,contacttitle from postgres.public.customers

Stages

Auto-Refresh: On

0

TIME

SCHEDULED 54.32ms

BLOCKED 1.28s

CPU 4.21ms

MEMORY

CUMULATIVE 0

CUMULATIVE TOTAL 535

CURRENT 0B

BUFFERS 0B

PEAK 0B

TASKS

PENDING 0

RUNNING 0

BLOCKED 0

TOTAL 1

SCHEDULED TIME SKEW

CPU TIME SKEW

1

TIME

SCHEDULED 58.62ms

BLOCKED 0.00ns

CPU 13.17ms

MEMORY

CUMULATIVE 0

CUMULATIVE TOTAL 121

CURRENT 0B

BUFFERS 0B

PEAK 0B

TASKS

PENDING 0

RUNNING 0

BLOCKED 0

TOTAL 1

SCHEDULED TIME SKEW

CPU TIME SKEW

Cluster Overview - PrestoQuery Overview - Prestolocalhost:8080/v1/query/20221204\_160820\_00003\_86bnz:pretty

JSONRaw DataHeaders

SaveCopyCollapse AllExpand AllFilter JSON

queryId: "20221204\_160820\_00003\_86bnz"

session:

queryId: "20221204\_160820\_00003\_86bnz"

transactionId: "c566dc8e-8183-4702-b532-8da48ac88089"

clientTransactionSupport: true

user: "furkan"

source: "presto-cli"

catalog: "postgres"

timeZoneKey: 2066

locale: "en\_US"

remoteUserAddress: "127.0.0.1"

userAgent: "StatementClientV1/0.278-6156edd"

clientTags: []

resourceEstimates: {}

startTime: 1670170100433

systemProperties: {}

catalogProperties: {}

unprocessedCatalogProperties: {}

roles: {}

preparedStatements: {}

sessionFunctions: {}

state: "FINISHED"

memoryPool: "general"

scheduled: true

self: "http://10.0.2.15:8080/v1/query/20221204\_160820\_00003\_86bnz"

fieldNames: