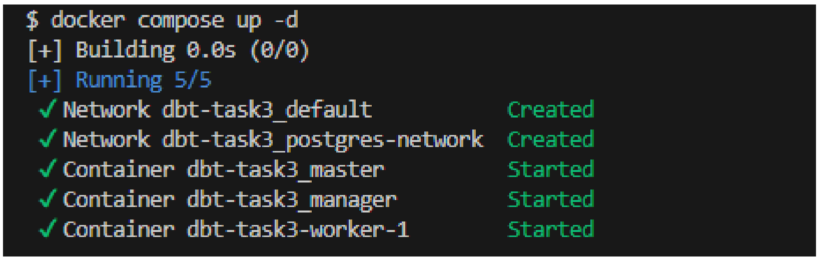
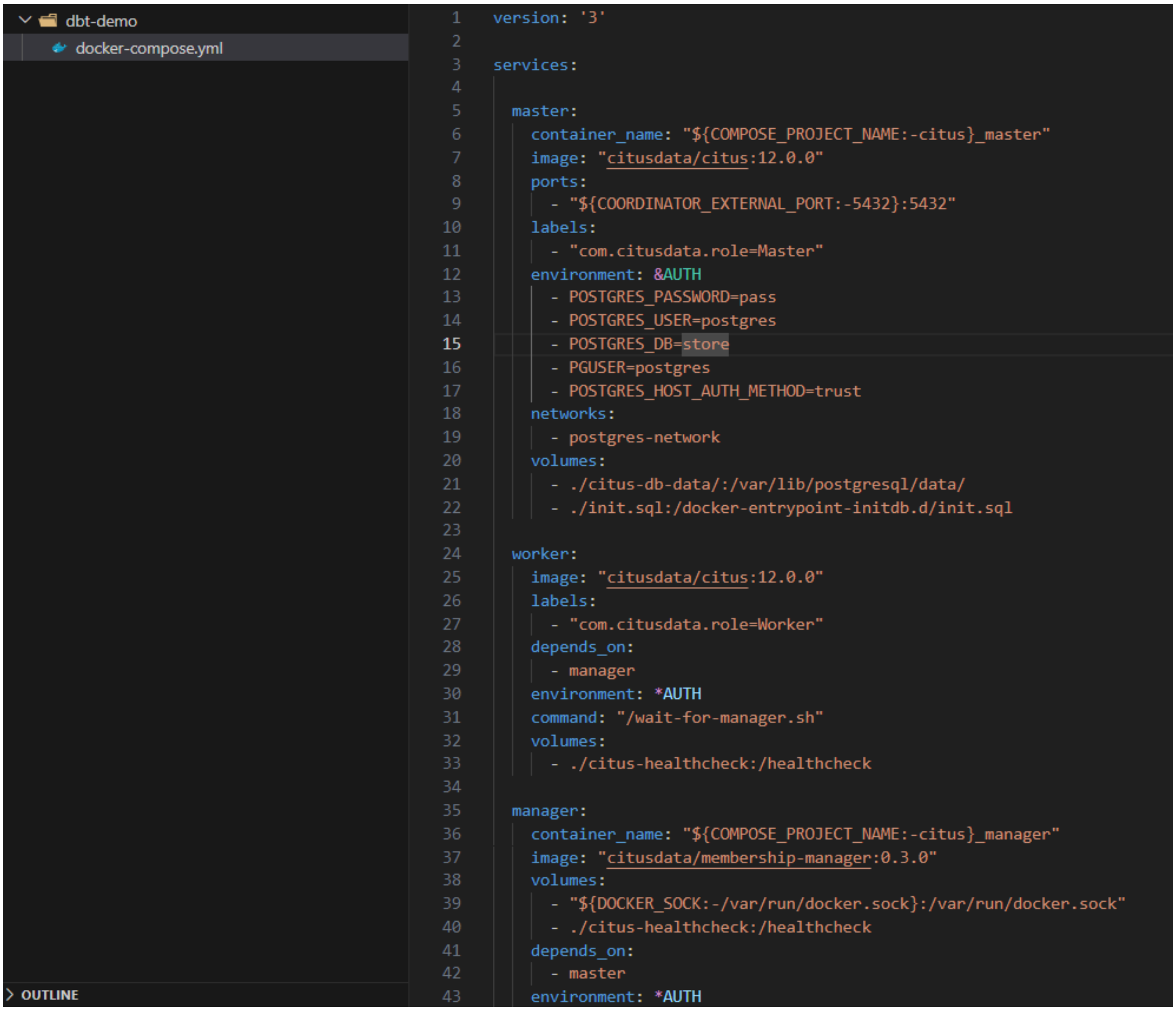
nurul taufik kurrahman

task 3

- docker compose

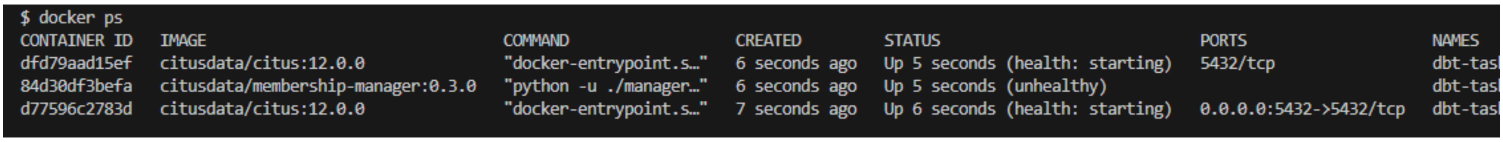


```
$ docker compose up -d
[+] Building 0.0s (0/0)
[+] Running 5/5
 ✓ Network dbt-task3_default           Created
 ✓ Network dbt-task3_postgres-network  Created
 ✓ Container dbt-task3_master          Started
 ✓ Container dbt-task3_manager         Started
 ✓ Container dbt-task3-worker-1        Started
```



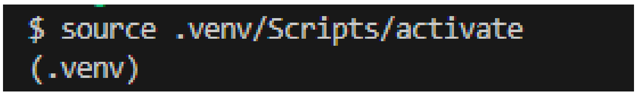
```
version: '3'

services:

  master:
    container_name: "${COMPOSE_PROJECT_NAME:-citus}_master"
    image: "citusdata/citus:12.0.0"
    ports:
      - "${COORDINATOR_EXTERNAL_PORT:-5432}:5432"
    labels:
      - "com.citusdata.role=Master"
    environment: &AUTH
      - POSTGRES_PASSWORD=pass
      - POSTGRES_USER=postgres
      - POSTGRES_DB=store
      - PGUSER=postgres
      - POSTGRES_HOST_AUTH_METHOD=trust
    networks:
      - postgres-network
    volumes:
      - ./citus-db-data/:/var/lib/postgresql/data/
      - ./init.sql:/docker-entrypoint-initdb.d/init.sql

  worker:
    image: "citusdata/citus:12.0.0"
    labels:
      - "com.citusdata.role=Worker"
    depends_on:
      - manager
    environment: *AUTH
    command: "/wait-for-manager.sh"
    volumes:
      - ./citus-healthcheck:/healthcheck

  manager:
    container_name: "${COMPOSE_PROJECT_NAME:-citus}_manager"
    image: "citusdata/membership-manager:0.3.0"
    volumes:
      - "${DOCKER_SOCK:-/var/run/docker.sock}:/var/run/docker.sock"
      - ./citus-healthcheck:/healthcheck
    depends_on:
      - master
    environment: *AUTH
```

- docker ps



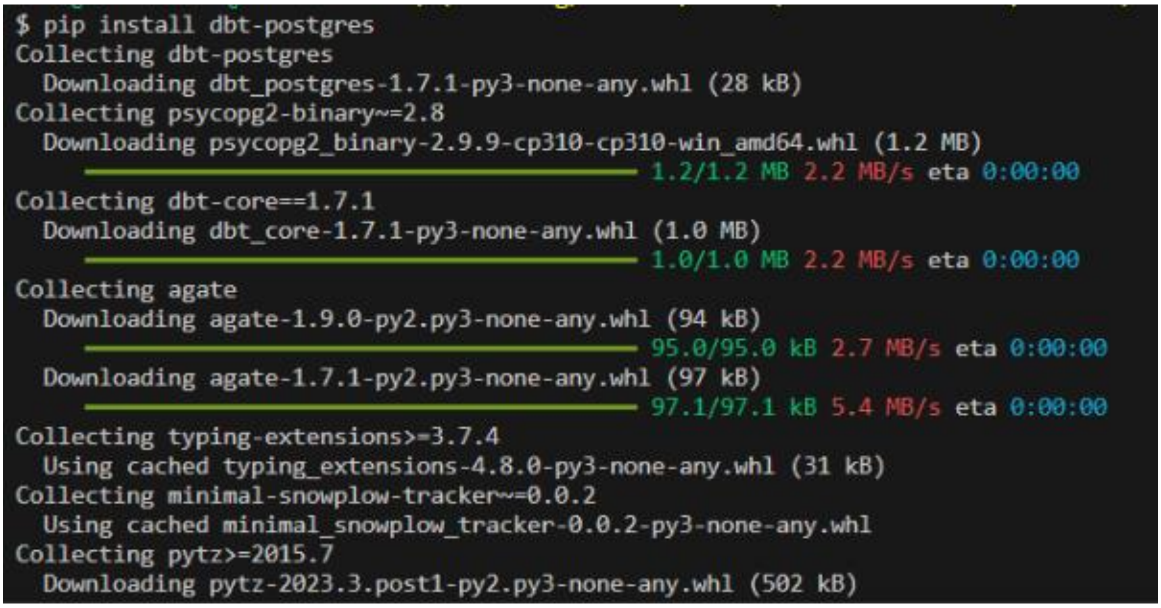
```
$ docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED         STATUS                            PORTS                    NAMES
dfd79aad15ef   citusdata/citus:12.0.0               "docker-entrypoint.s…"   6 seconds ago   Up 5 seconds (health: starting)   5432/tcp                 dbt-tas
84d30df3befa   citusdata/membership-manager:0.3.0   "python -u ./manager…"   6 seconds ago   Up 5 seconds (unhealthy)                                   dbt-tas
d77596c2783d   citusdata/citus:12.0.0               "docker-entrypoint.s…"   7 seconds ago   Up 6 seconds (health: starting)   0.0.0.0:5432->5432/tcp   dbt-tas
```

- active venv



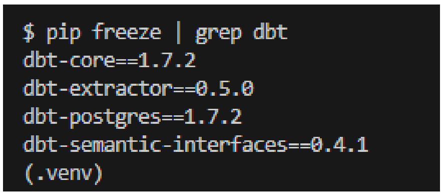
```
$ source .venv/Scripts/activate
(.venv)
```

- install dbt postgres

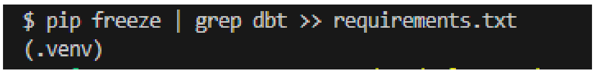


```
$ pip install dbt-postgres
Collecting dbt-postgres
  Downloading dbt_postgres-1.7.1-py3-none-any.whl (28 kB)
Collecting psycopg2-binary~=2.8
  Downloading psycopg2_binary-2.9.9-cp310-cp310-win_amd64.whl (1.2 MB)
     ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 1.2/1.2 MB 2.2 MB/s eta 0:00:00
Collecting dbt-core==1.7.1
  Downloading dbt_core-1.7.1-py3-none-any.whl (1.0 MB)
     ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 1.0/1.0 MB 2.2 MB/s eta 0:00:00
Collecting agate
  Downloading agate-1.9.0-py2.py3-none-any.whl (94 kB)
     ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 95.0/95.0 kB 2.7 MB/s eta 0:00:00
  Downloading agate-1.7.1-py2.py3-none-any.whl (97 kB)
     ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 97.1/97.1 kB 5.4 MB/s eta 0:00:00
Collecting typing-extensions>=3.7.4
  Using cached typing_extensions-4.8.0-py3-none-any.whl (31 kB)
Collecting minimal-snowplow-tracker~=0.0.2
  Using cached minimal_snowplow_tracker-0.0.2-py3-none-any.whl
Collecting pytz>=2015.7
  Downloading pytz-2023.3.post1-py2.py3-none-any.whl (502 kB)
```

- requirements

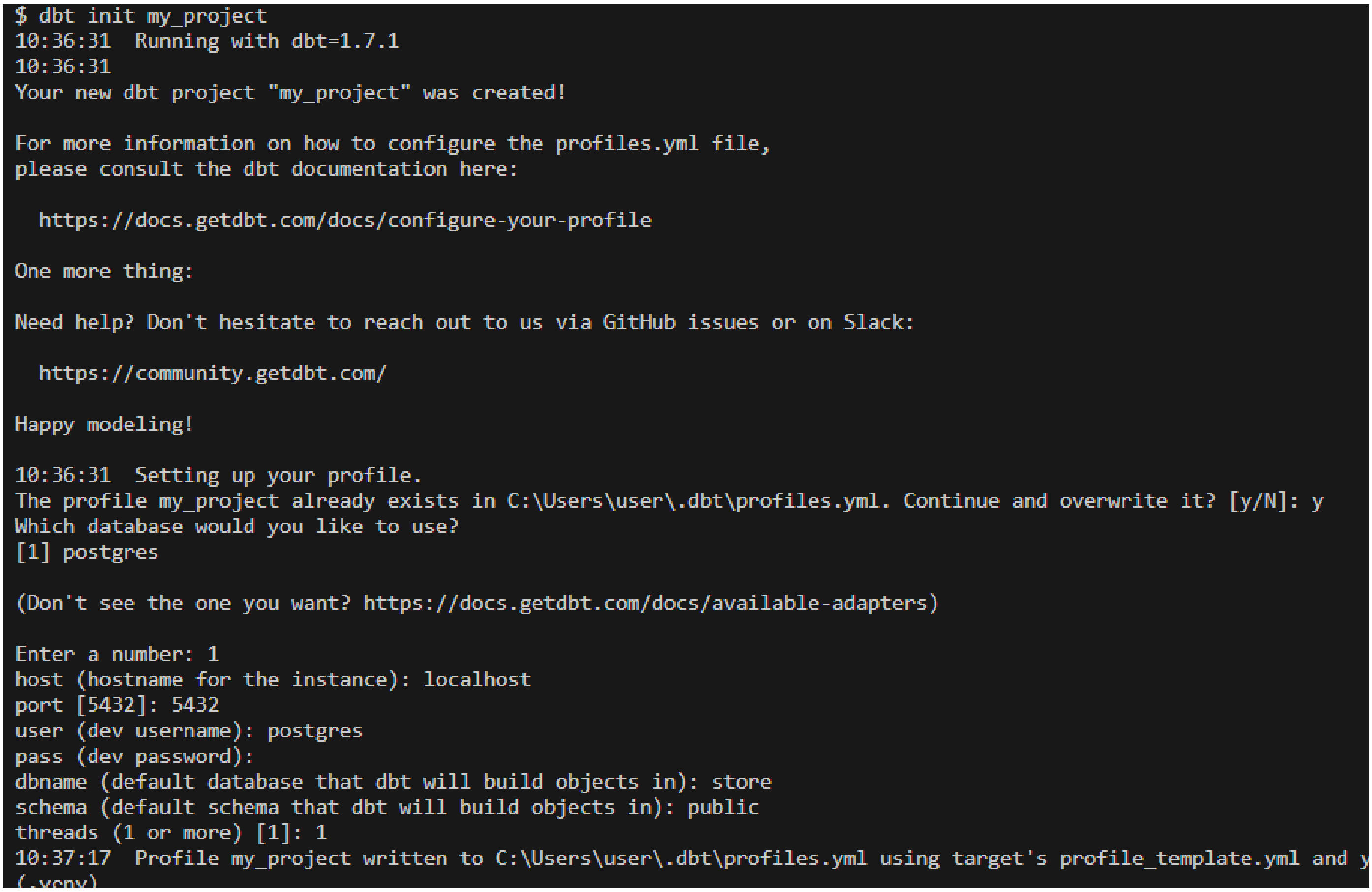


```
$ pip freeze | grep dbt
dbt-core==1.7.2
dbt-extractor==0.5.0
dbt-postgres==1.7.2
dbt-semantic-interfaces==0.4.1
(.venv)
```



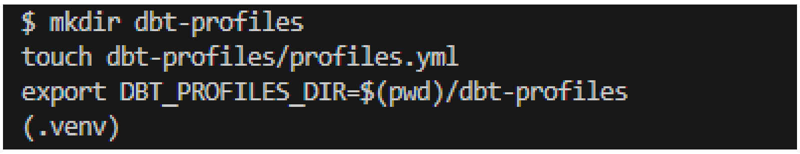
```
$ pip freeze | grep dbt >> requirements.txt
(.venv)
```

- dbt-init

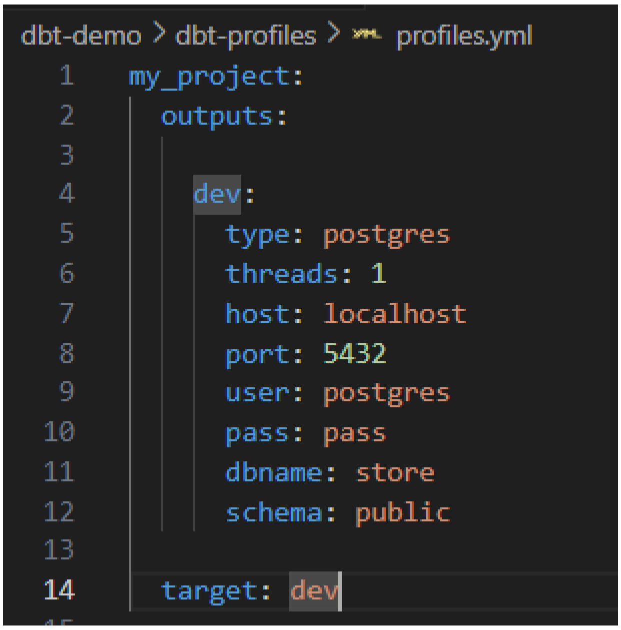


```
$ dbt init my_project
10:36:31  Running with dbt=1.7.1
10:36:31
Your new dbt project "my_project" was created!

For more information on how to configure the profiles.yml file,
please consult the dbt documentation here:

  https://docs.getdbt.com/docs/configure-your-profile

One more thing:

Need help? Don't hesitate to reach out to us via GitHub issues or on Slack:

  https://community.getdbt.com/

Happy modeling!

10:36:31  Setting up your profile.
The profile my_project already exists in C:\Users\user\.dbt\profiles.yml. Continue and overwrite it? [y/N]: y
Which database would you like to use?
[1] postgres

(Don't see the one you want? https://docs.getdbt.com/docs/available-adapters)

Enter a number: 1
host (hostname for the instance): localhost
port [5432]: 5432
user (dev username): postgres
pass (dev password):
dbname (default database that dbt will build objects in): store
schema (default schema that dbt will build objects in): public
threads (1 or more) [1]: 1
10:37:17  Profile my_project written to C:\Users\user\.dbt\profiles.yml using target's profile_template.yml and y
(.venv)
```

- dbt-profile

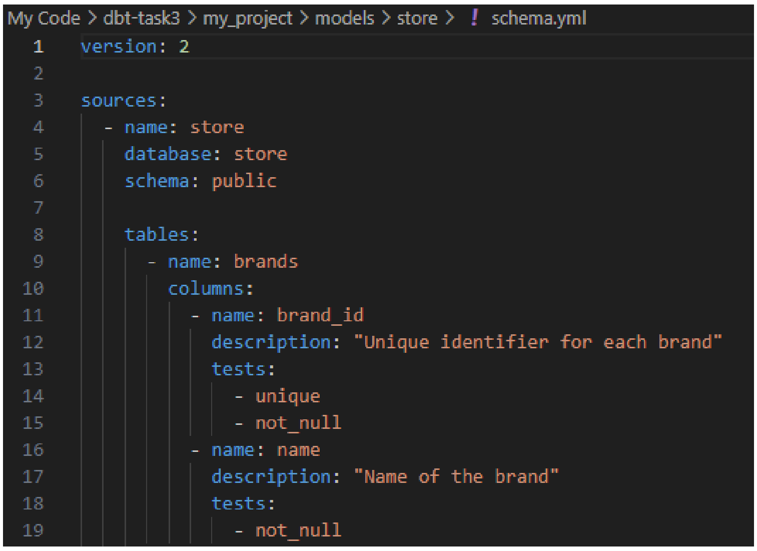


```
$ mkdir dbt-profiles
touch dbt-profiles/profiles.yml
export DBT_PROFILES_DIR=$(pwd)/dbt-profiles
(.venv)
```



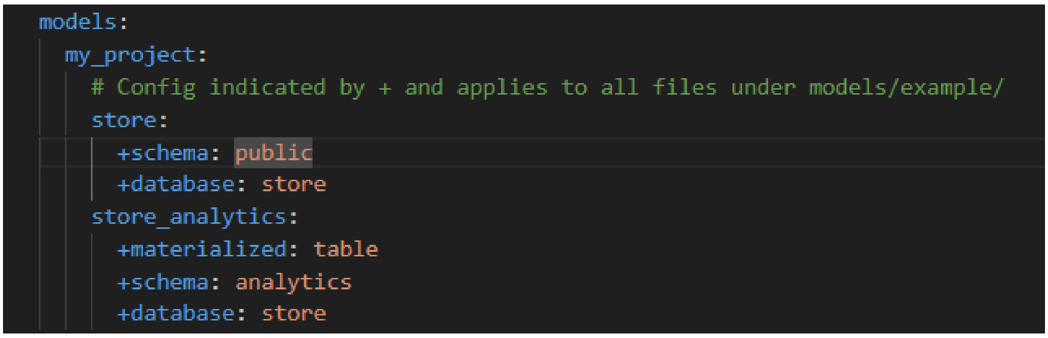
```yaml
my_project:
  outputs:

    dev:
      type: postgres
      threads: 1
      host: localhost
      port: 5432
      user: postgres
      pass: pass
      dbname: store
      schema: public

  target: dev
```

- schema


My Code > dbt-task3 > my_project > models > store > ! schema.yml

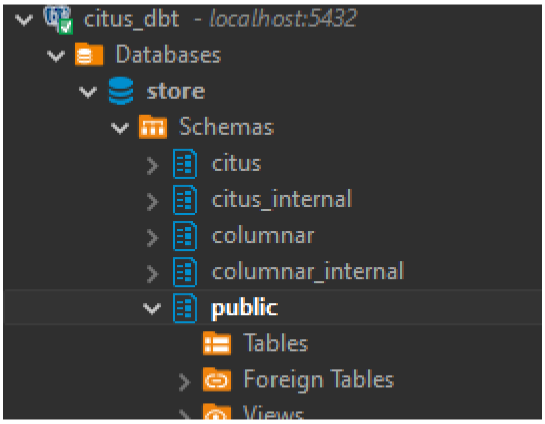
```yaml
version: 2

sources:
  - name: store
    database: store
    schema: public

    tables:
      - name: brands
        columns:
          - name: brand_id
            description: "Unique identifier for each brand"
            tests:
              - unique
              - not_null
          - name: name
            description: "Name of the brand"
            tests:
              - not_null
```

- dbt -project-config

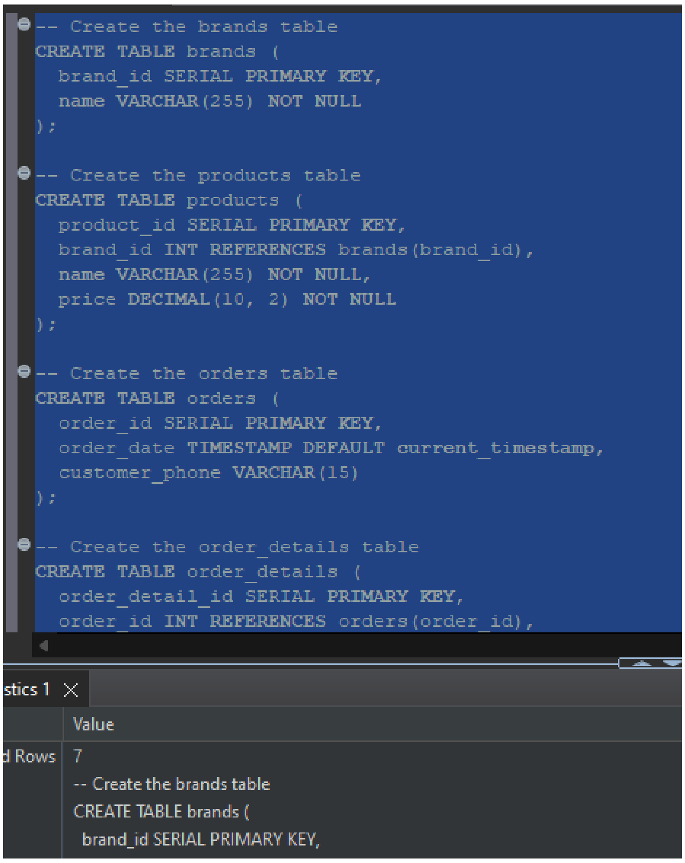


```yaml
models:
  my_project:
    # Config indicated by + and applies to all files under models/example/
    store:
      +schema: public
      +database: store
    store_analytics:
      +materialized: table
      +schema: analytics
      +database: store
```

- public tables



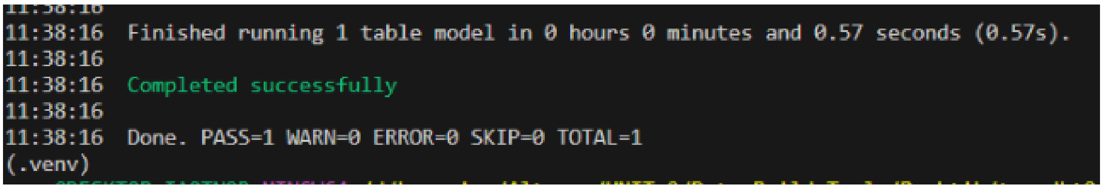
- create tables



```
-- Create the brands table
CREATE TABLE brands (
  brand_id SERIAL PRIMARY KEY,
  name VARCHAR(255) NOT NULL
);

-- Create the products table
CREATE TABLE products (
  product_id SERIAL PRIMARY KEY,
  brand_id INT REFERENCES brands(brand_id),
  name VARCHAR(255) NOT NULL,
  price DECIMAL(10, 2) NOT NULL
);

-- Create the orders table
CREATE TABLE orders (
  order_id SERIAL PRIMARY KEY,
  order_date TIMESTAMP DEFAULT current_timestamp,
  customer_phone VARCHAR(15)
);

-- Create the order_details table
CREATE TABLE order_details (
  order_detail_id SERIAL PRIMARY KEY,
  order_id INT REFERENCES orders(order_id),
```

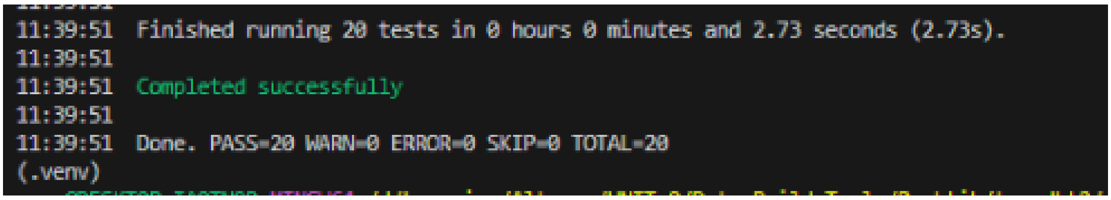
```
        Value
d Rows  7
        -- Create the brands table
        CREATE TABLE brands (
         brand_id SERIAL PRIMARY KEY,
```

- dbt run



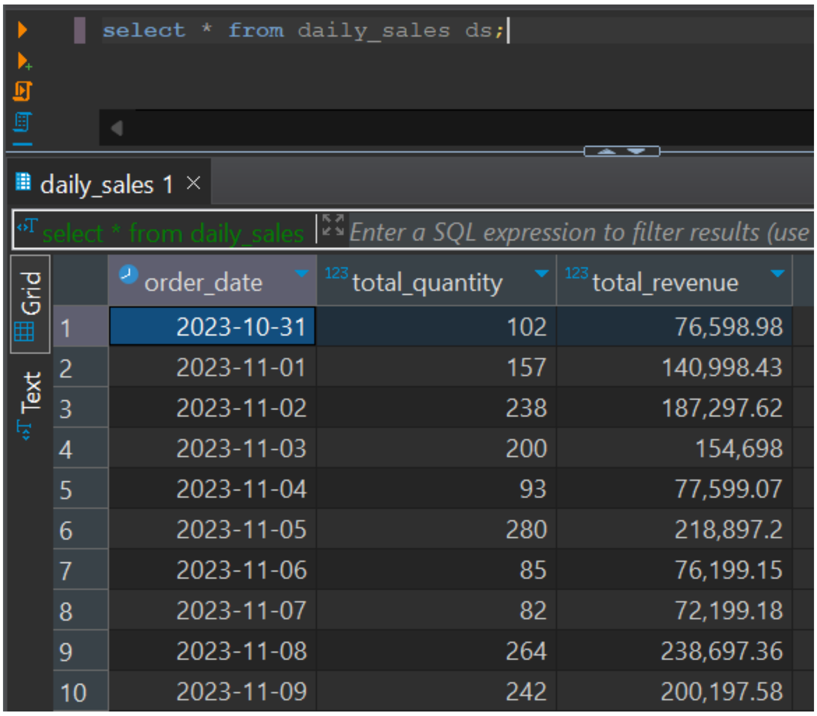
```
11:38:16
11:38:16  Finished running 1 table model in 0 hours 0 minutes and 0.57 seconds (0.57s).
11:38:16
11:38:16  Completed successfully
11:38:16
11:38:16  Done. PASS=1 WARN=0 ERROR=0 SKIP=0 TOTAL=1
(.venv)
```

- dbt test



```
11:39:51  Finished running 20 tests in 0 hours 0 minutes and 2.73 seconds (2.73s).
11:39:51
11:39:51  Completed successfully
11:39:51
11:39:51  Done. PASS=20 WARN=0 ERROR=0 SKIP=0 TOTAL=20
(.venv)
```

- Tabel daily_sales



```
select * from daily_sales ds;
```

daily_sales 1
select * from daily_sales
Enter a SQL expression to filter results (use
Grid
Text

	order_date	total_quantity	total_revenue
1	2023-10-31	102	76,598.98
2	2023-11-01	157	140,998.43
3	2023-11-02	238	187,297.62
4	2023-11-03	200	154,698
5	2023-11-04	93	77,599.07
6	2023-11-05	280	218,897.2
7	2023-11-06	85	76,199.15
8	2023-11-07	82	72,199.18
9	2023-11-08	264	238,697.36
10	2023-11-09	242	200,197.58