The  [DataTalksClub](https://www.linkedin.com/company/datatalks-club/) [#dezoomcamp](https://www.linkedin.com/feed/hashtag/?keywords=dezoomcamp&highlightedUpdateUrns=urn%3Ali%3Aactivity%3A6891390049959710720) has been a week and three days in and has been full of excitement. In the first week, I gained a deeper understanding of containerization using Docker. Docker is a platform that allows developers and sysadmins to build, ship, and run distributed applications on various devices using containers. The main advantages of using Docker include isolation, portability, scalability, version control, resource efficiency, and cost savings. I also learned how to build Docker containers using the command line, Docker files, and Docker-compose files, as well as building Docker networks. Additionally, I was able to refresh my knowledge of using Terraform to build resources on GCP and learned how to connect to GCP using SDKs. Furthermore, I was amazed to discover that you can use Pandas to generate data schema to create tables in SQL.

The bootcamp was not only about learning but also about hands-on practice. I built containers for Postgres, Postgres-admin, and a Python script for ingesting data into the Postgres database. For this week’s assignment, I loaded data from the NYC Taxi & Limousine Commission using the ingestion container and wrote several queries to analyze the data. Furthermore, I used Terraform to build a GCP cloud storage bucket and BigQuery dataset from my local computer.

While the experience has been fun so far, it has also been challenging, possibly due to my use of a Windows operating system. At our initial meeting, Luis Oliveira stated that he spent 6 hours per week during the last Zoomcamp; however, I found that I personally spent a minimum of 4 hours daily, with a significant portion of that time dedicated to debugging. Nevertheless, the community has been very helpful in debugging, and as I became more comfortable with the program, I found myself able to help others facing similar challenges. With eight weeks still to go, there is much more to learn, and you can always join in on the ride if you're interested in data engineering.

Thank you, [Alexey Grigorev](https://www.linkedin.com/in/ACoAAAW0LKEBXPrPQ9kGjzloHkzNwHOFxLiHcBU) , and your team; I am excited for week 2.

[#dataengineering](https://www.linkedin.com/feed/hashtag/?keywords=dataengineering&highlightedUpdateUrns=urn%3Ali%3Aactivity%3A7020852318950633473) [#newchallenge](https://www.linkedin.com/feed/hashtag/?keywords=newchallenge&highlightedUpdateUrns=urn%3Ali%3Aactivity%3A7020852318950633473) [#upskilling](https://www.linkedin.com/feed/hashtag/?keywords=upskilling&highlightedUpdateUrns=urn%3Ali%3Aactivity%3A7020852318950633473)

new file: .gitattributes

new file: .gitignore

new file: week\_1\_basics\_n\_setup/1\_terraform\_gcp/.terraform-version

new file: week\_1\_basics\_n\_setup/1\_terraform\_gcp/instructure.md

new file: week\_1\_basics\_n\_setup/1\_terraform\_gcp/main.tf

new file: week\_1\_basics\_n\_setup/1\_terraform\_gcp/terraform.exe

new file: week\_1\_basics\_n\_setup/1\_terraform\_gcp/variables.tf

modified: week\_1\_basics\_n\_setup/2\_docker\_sql/Dockerfile

new file: week\_1\_basics\_n\_setup/2\_docker\_sql/analysis.sql

modified: week\_1\_basics\_n\_setup/2\_docker\_sql/docker-compose.yaml

new file: week\_1\_basics\_n\_setup/2\_docker\_sql/docker.md

new file: week\_1\_basics\_n\_setup/2\_docker\_sql/ingest\_data.py