**dbt intro** - optional class

# dbt Introduction

**What is dbt?**

dbt is an open-source software that enables data analysts and engineers to transform data in their warehouse more effectively by simply writing SQL queries.

**Key features:**
- Version control:
- Modularization:
- Testing:
- Documentation.

**Products:**
- **dbt core:** a set of open source Python packages, run via the command line, that allows transform, document, and test your data
- **dbt Cloud:** a web based UI that allows you to both develop and deploy data pipelines (built on top of dbt Core)

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**Why is it so widely used?**

- Rise of analytics engineering;
- Simplification of complex data transformations;
- Distance reduction from engineering roles and analytics roles;
- Usage of python or SQL;

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## Data Analyst

- Efficient collaboration;
- Data accuracy;
- Reduced development time

## Data Scientist

- Streamlined data exploration;
- Collaborative research;
- Model production;

## Data Engineer

- Efficient ETL workflow;
- Scalability;
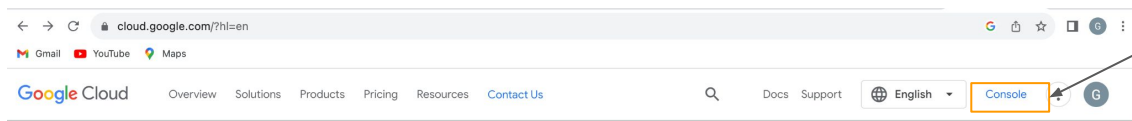- Versioned data pipelines;
- Easy to feed data to other departments;

# dbt Introduction

## Setup BigQuery & dbt!
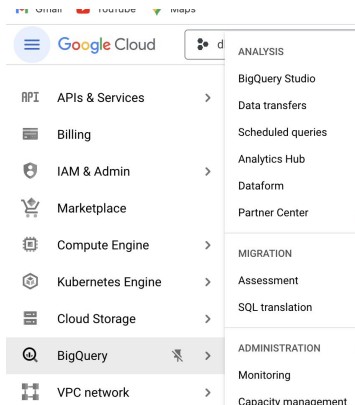
# dbt cloud Introduction

## 1. Setup Google BigQuery

1. Setup a google developer account (https://developers.google.com/)
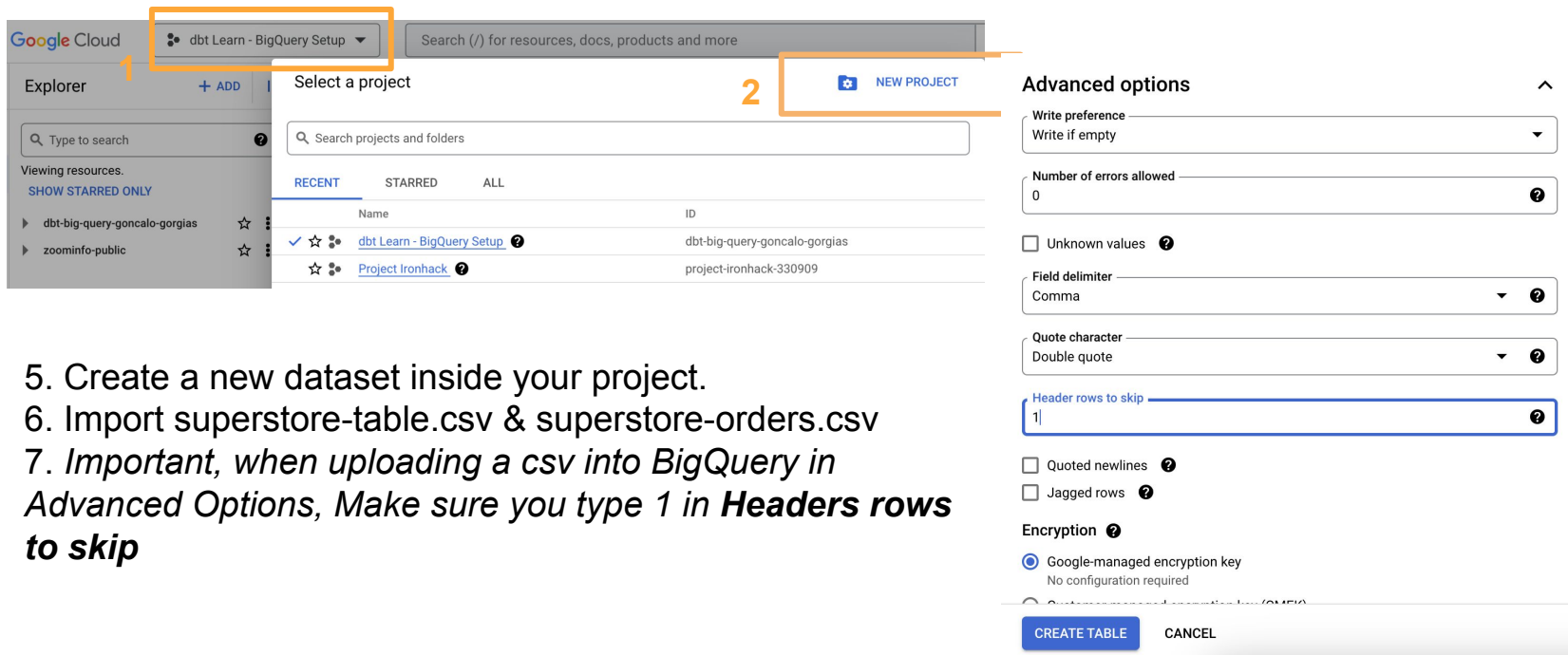2. Access Google Cloud Console (https://cloud.google.com/)



3. Go to Big Query

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### 4. Create a new project



### 5. Create a new dataset inside your project.
### 6. Import superstore-table.csv & superstore-orders.csv
### 7. *Important, when uploading a csv into BigQuery in Advanced Options, Make sure you type 1 in **Headers rows to skip***

# dbt cloud Introduction

## 1. Setup dbt connection to BigQuery

1. Create dbt cloud account (https://www.getdbt.com/product/dbt-cloud)
2. Setup dbt <> Big Query connection (https://docs.getdbt.com/quickstarts/bigquery?step=1)
3. **Generate BigQuery credentials**
   a. Start the GCP credentials wizard.
   b. Create a service account for your new project from the Service accounts page.
   c. Create a service account key for your new project from the Service accounts page.
4. Follow instructions on connection BigQuery in dbt (https://docs.getdbt.com/docs/cloud/connect-data-platform/connect-bigquery)

If you want to learn more, dbt has multiple free courses for you
https://courses.getdbt.com/collections

Demo time!