**POSTGRE SQL LEARNINGS**

**1. Connecting to PostgreSQL Database**

* Connect to PostgreSQL (from command prompt or terminal):

psql -U postgres -d <dbname>

**2. List Databases**

* Show List of Databases:

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**3. List Tables**

* Show Tables in the Current Database:

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**4. Create a Database**

* Create a New Database:

CREATE DATABASE <dbname>;

**5. Switching Between Databases**

* Connect to a Different Database:

\c <dbname>

**6. Create Table**

* Create a Table: Use this command to create a table with columns.
* Example:

CREATE TABLE job\_demographics (

job\_category VARCHAR(255),

year INT,

month INT,

date DATE,

sex VARCHAR(50),

hispanic\_latino INT,

american\_indian\_alaskan\_native INT,

asian INT,

two\_or\_more\_races INT,

object\_id SERIAL PRIMARY KEY

);

**7. Drop a Table**

* Delete a Table:

DROP TABLE job\_demographics;

**8. Insert Data into Table**

* Insert Data into Table: You can manually insert values into a table.
* Example:

INSERT INTO job\_demographics (job\_category, year, month, date, sex, hispanic\_latino, american\_indian\_alaskan\_native, asian, two\_or\_more\_races, object\_id) VALUES ('Software Developer', 2024, 11, '2024-11-01', 'Male', 5, 2, 8, 3, DEFAULT);

**9. Import Data from CSV**

* Copy Data from CSV File into Table:
* Use \COPY command for importing data from a CSV file:

\COPY job\_demographics (job\_category, year, month, date, sex, hispanic\_latino, american\_indian\_alaskan\_native, asian, two\_or\_more\_races, object\_id) FROM 'C:/path\_to\_file/DataSet.csv' DELIMITER ',' CSV HEADER;

**10. View Table Data**

* Select All Data from a Table:

SELECT \* FROM job\_demographics;

**11. Modify Table Structure**

* Alter Table: Use ALTER TABLE to add, modify, or delete columns. Example: To add a column:

ALTER TABLE job\_demographics ADD COLUMN new\_column VARCHAR(255);

**12. Update Table Data**

* Update Existing Data in Table:

UPDATE job\_demographics

SET hispanic\_latino = 10

WHERE job\_category = 'Software Developer';

**13. Delete Data from Table**

* Delete Data from a Table:

DELETE FROM job\_demographics WHERE year = 2024;

**14. Basic SQL Queries**

* Select Specific Columns:

SELECT job\_category, year, sex FROM job\_demographics;

* Using WHERE Clause (filter data):

SELECT \* FROM job\_demographics WHERE sex = 'Male';

* Using ORDER BY (sort data):

SELECT \* FROM job\_demographics ORDER BY year ASC;

**15. Clear Screen in psql (Windows)**

* Clear Terminal Screen:

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**16. Exiting psql**

* Exit the PostgreSQL shell:

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