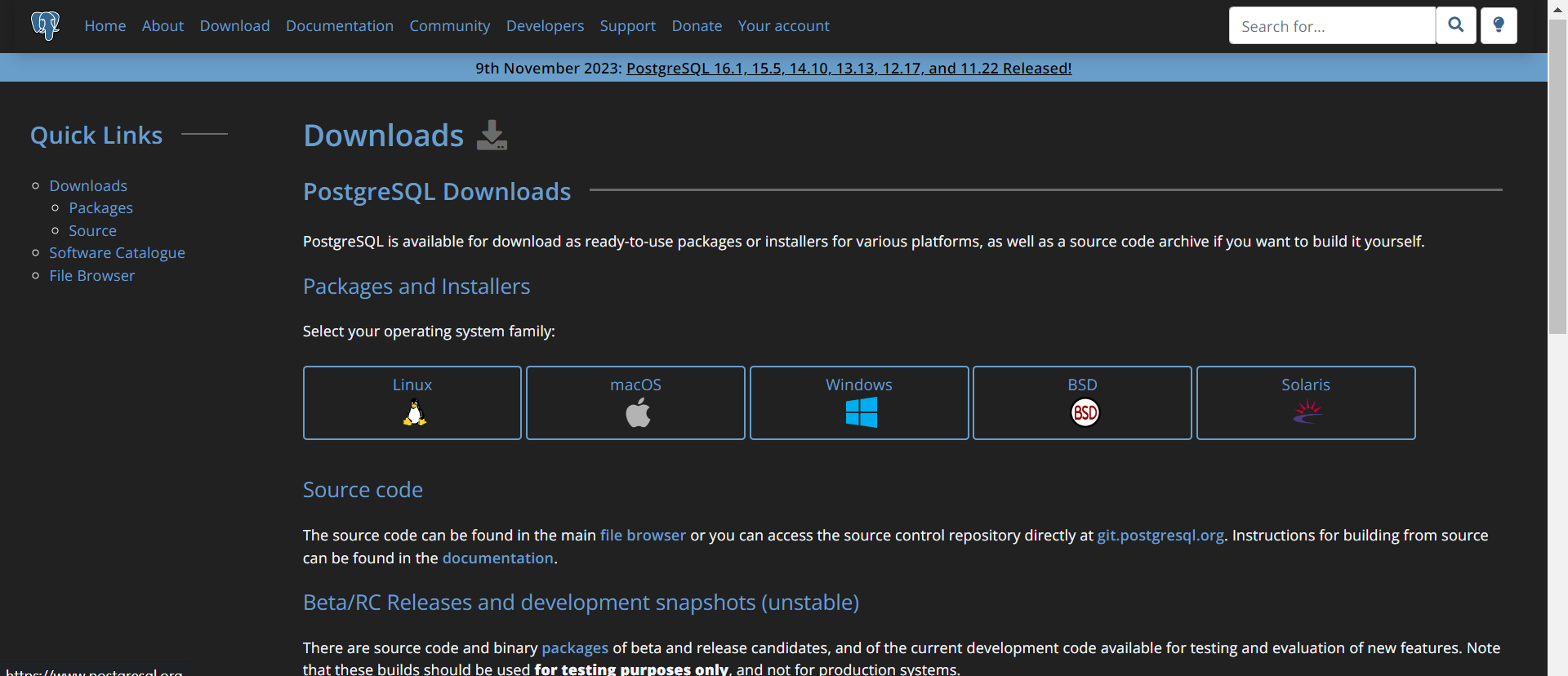
Download **postgres** using the link <https://www.postgresql.org/download/>

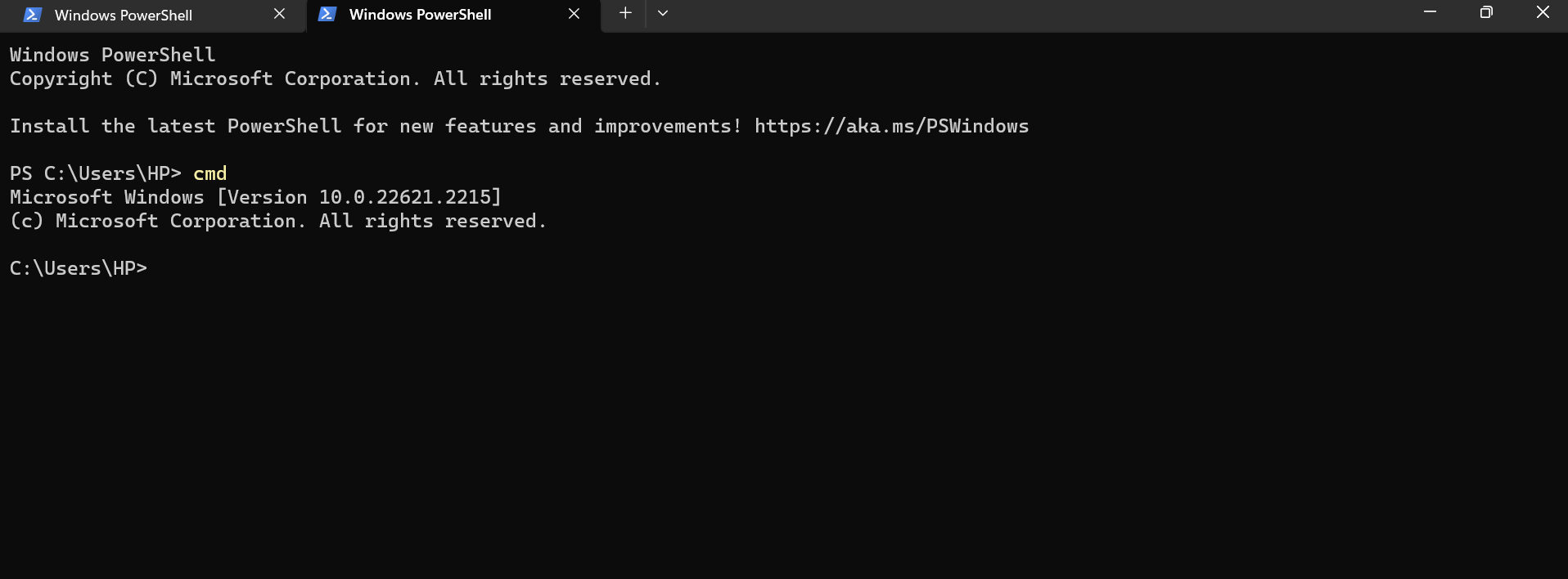
C:\ERD-Install-and-Configuring-A-Database-Server-PostgreSQL-and-MySQL\Images

Ensure to add the directory of the **postgres** from your file explorer if you are using windows to your system path, so you could run **postgres** commands and **SQL** commands from your command line or terminal.

After your installation, configure postgres to work, by creating your **username** and **password** during the installation process.

Main Steps:

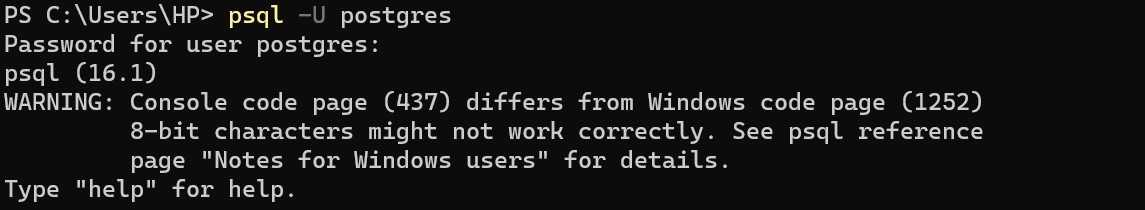
1. Open your **terminal** or **command line** if you are using **windows.**

****

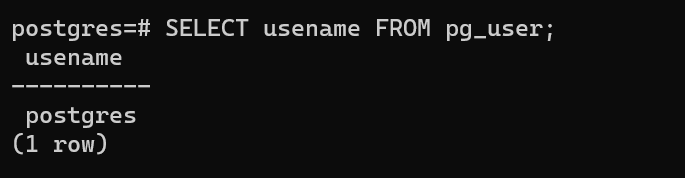
1. Check which **username** is current logged in postgres, but first use the command below to loggin postgres.

**psql -U postgres**

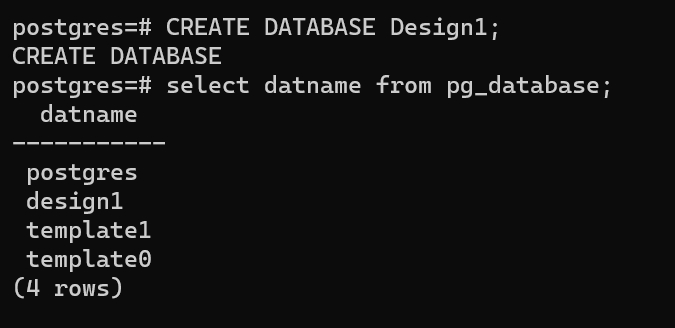
Insert your password the one you created during the installation.

****

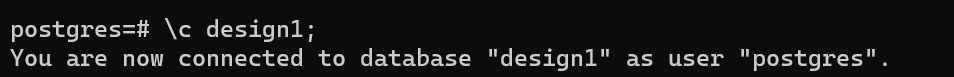
Find out the user logged in using this command “ **SELECT usename FROM pg\_user;**”



1. Create a database using the command “ **CREATE DATABASE Design1;**” and on next shell line “ **SELECT datname FROM pg\_database;**” follow the picture below.

****

1. To check in to the database you just created use “ **\c design1**” follow the picture below.

****

1. To create the tables using the SQL schema follow the scripts below.

**To create the Customers Table.**

**-- Create Customers table**

CREATE TABLE Customers (

customer\_id SERIAL PRIMARY KEY,

customer\_sname VARCHAR(50),

first\_name VARCHAR(50),

email VARCHAR(100),

phone\_number VARCHAR(20),

address VARCHAR(255),

registration\_date DATE

);

**-- Create Product table**

CREATE TABLE Product (

product\_id SERIAL PRIMARY KEY,

product\_name VARCHAR(100),

description TEXT,

price NUMERIC,

manufacturer VARCHAR(50),

production\_date DATE,

expiration\_date DATE

);

**-- Create Transactions table**

CREATE TABLE Transactions (

transaction\_id SERIAL PRIMARY KEY,

customer\_id INT REFERENCES Customers(customer\_id),

transaction\_date DATE

);

**To create the ProductTransactions Table.**

**-- Create ProductTransactions table**

CREATE TABLE ProductTransactions (

product\_transaction\_id SERIAL PRIMARY KEY,

customer\_id INT REFERENCES Customers(customer\_id),

product\_id INT REFERENCES Product(product\_id),

quantity INT,

total\_price NUMERIC,

transaction\_id INT REFERENCES Transactions(transaction\_id),

transaction\_date DATE

);

**To create the Warehouse Table.**

**-- Create Warehouse table**

CREATE TABLE Warehouse (

warehouse\_id SERIAL PRIMARY KEY,

product\_id INT REFERENCES Product(product\_id),

quantity INT,

received\_date DATE,

expiration\_date DATE,

transaction\_id INT,

CONSTRAINT fk\_product\_id

FOREIGN KEY (product\_id)

REFERENCES Product(product\_id),

CONSTRAINT fk\_transaction\_id

FOREIGN KEY (transaction\_id)

REFERENCES Transactions(transaction\_id)

);

-- Add Index on product\_id and transaction\_id for optimization

CREATE INDEX idx\_warehouse\_product\_transaction

ON Warehouse (product\_id, transaction\_id);

**To create the store Table.**

**-- Create Store table**

CREATE TABLE Store (

store\_id SERIAL PRIMARY KEY,

customer\_id INT REFERENCES Customers(customer\_id),

product\_id INT REFERENCES Product(product\_id),

transaction\_id INT REFERENCES Transactions(transaction\_id),

warehouse\_id INT REFERENCES Warehouse(warehouse\_id),

quantity INT,

total\_price NUMERIC,

sale\_date DATE

);

-- Add Index on product\_id, transaction\_id, and warehouse\_id for optimization

CREATE INDEX idx\_store\_product\_transaction\_warehouse

ON Store (product\_id, transaction\_id, warehouse\_id);