# Documentation for PostgreSQL database

Required installation

PostgreSQL
- Download installer for PostgreSQL 17.4 and relevant OS here(if you can't click on link, then right click and choose 'Åben link'):

    [EDB: Open-Source, Enterprise Postgres Database Management](#)

- Run file and after installation has been completed, the screen below will appear. Make sure that the checkbox(launch stack builder at exit) is not checked and finish installation
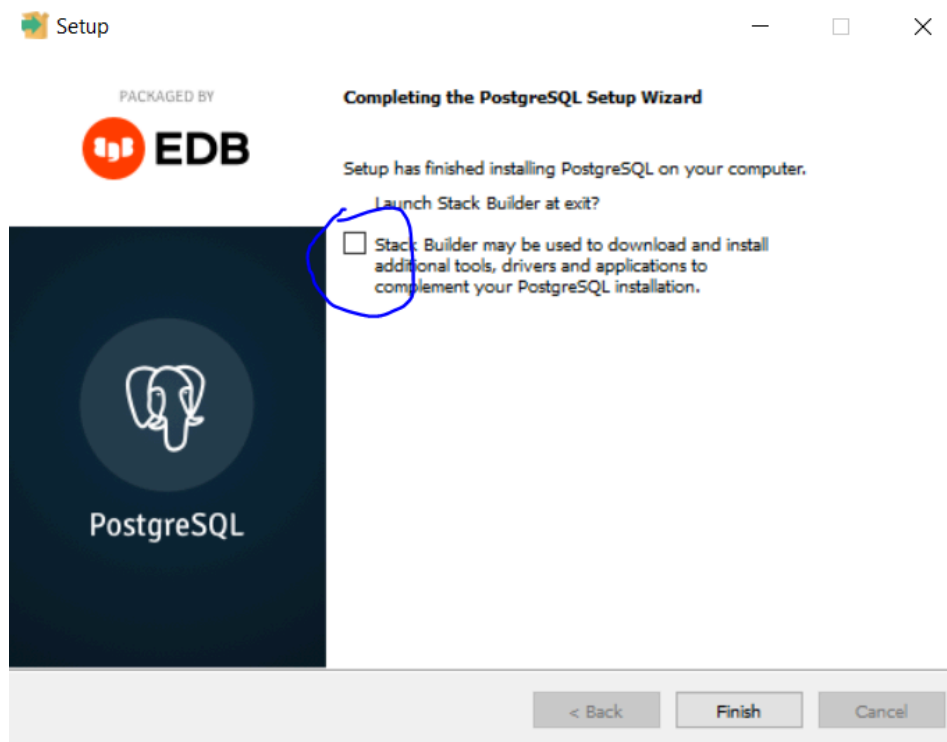
- To use the cli tool called psql, locate bin folder, path for windows is like this:

```
C:\Program Files\PostgreSQL\17\bin
```

Add this to your system environment variable called 'Path' on Windows.

Connect to database

There are 4 users with different privileges. Below you can see information listed, necessary to connect with database, which is hosted on neon.tech:

```
Host: ep-crimson-king-a2d0puri-pooler.eu-central-1.aws.neon.tech
Port: 5432
Database name: it_firm
Schema: personel
Table: employees
View: vw_employees_limited
Password: ThunderChicken2025
Usernames:
   1) pg_database_owner
   2) readonly
   3) insert_only
   4) readonly_limited
```

First user has admin rights and readonly can only do select statements and insert_only can only create rows. The password is the same for all users.

The last user(*readonly_limited*) can only see the hire dates of the employees and for this, a view is made on top of the *employees* table, called vw_employees_limited. See example with view later in documentation.

Open a terminal and run the following psql command:

```
psql -h ep-crimson-king-a2d0puri-pooler.eu-central-1.aws.neon.tech
-p 5432 -U readonly -d it_firm -W
```

Flag explanation:

```
-h the address of host
-p the port number, where database is running
-U username
```

```
-d database name
-W makes cli prompt for password
```

To logout press ctrl + c and try to login with the other users. Trying to use privileges a user does not have, will give an error saying access denied.

Once logged in, you can try out this command:

```
SELECT * FROM personel.employees;
```

Creating a row (for insert_only user fx)

```
INSERT   INTO   personel.employees   (employment_type,   firstname,
middlename,  lastname,  hire_date)  VALUES  ('DEV',  'RAJ',  'PATHAK',
'KUMAR', '2025-04-08');
```

If you login with *readonly_limited* you can attempt to use a SELECT statement with employees table, but it wont work, because this user is only supposed to have access to 1 column in the table and this is where the view made for this purpose comes in.

The command below should display all hire dates:

```
SELECT * FROM vw_employees_limited;
```