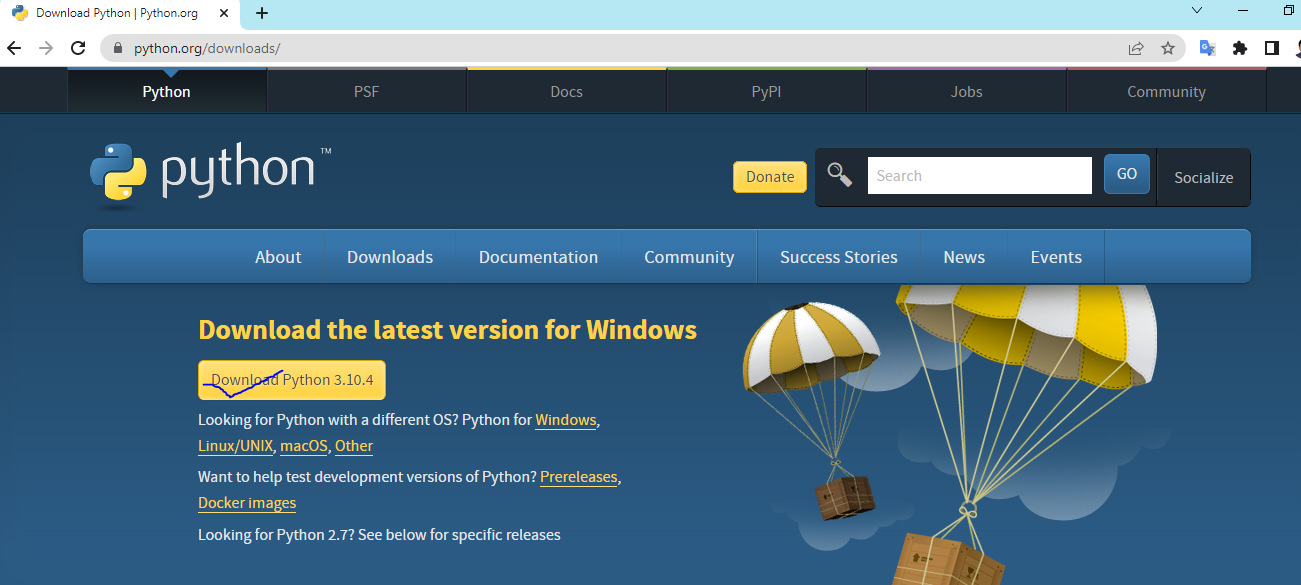
# **Python Download & installation:**

1. **Please download Python from** [**https://www.python.org/downloads/**](https://www.python.org/downloads/)

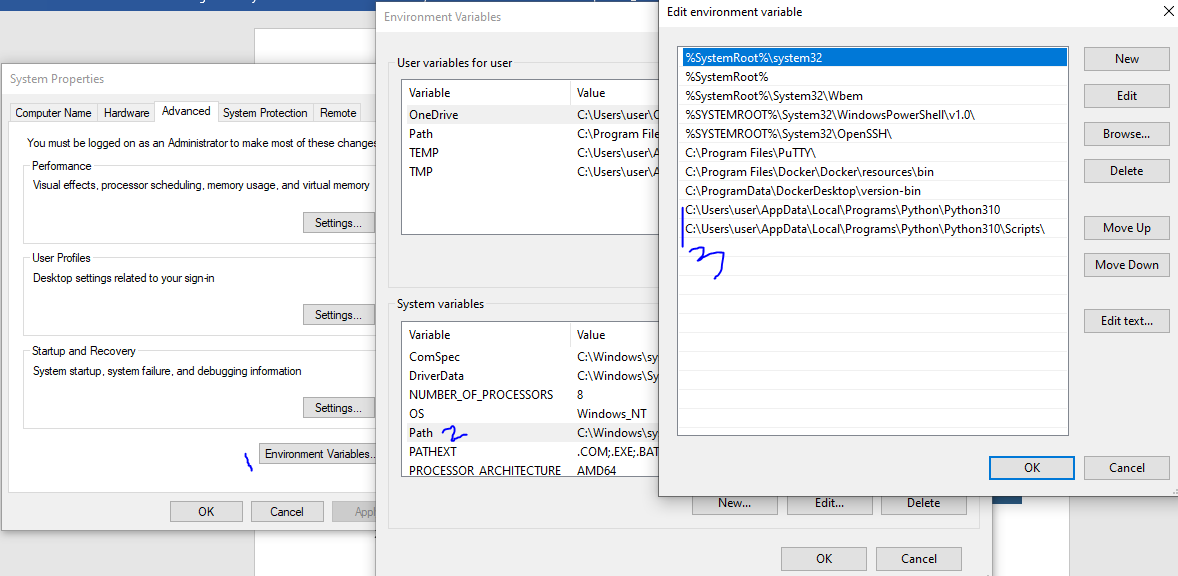


1. **Please set the environmental variables**

Go to search box “Environmental variables”-🡪 Click “Environmental variables”-🡪 System variables path edit 🡪 Click New 🡪 ADD

C:\Users\user\AppData\Local\Programs\Python\Python310\

C:\Users\user\AppData\Local\Programs\Python\Python310\Scripts\

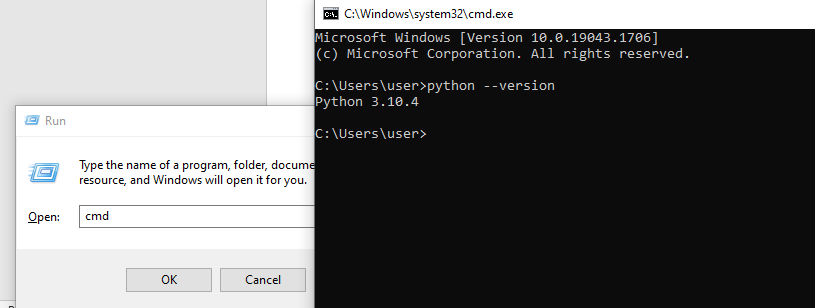


1. **Windows+R then type cmd and enter**

C:\Users\user>python --version

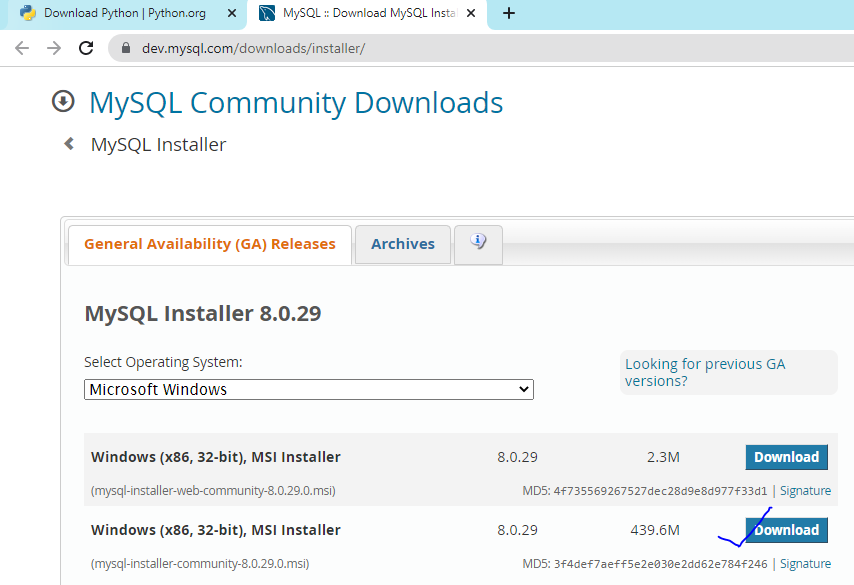
Python 3.10.4

C:\Users\user>

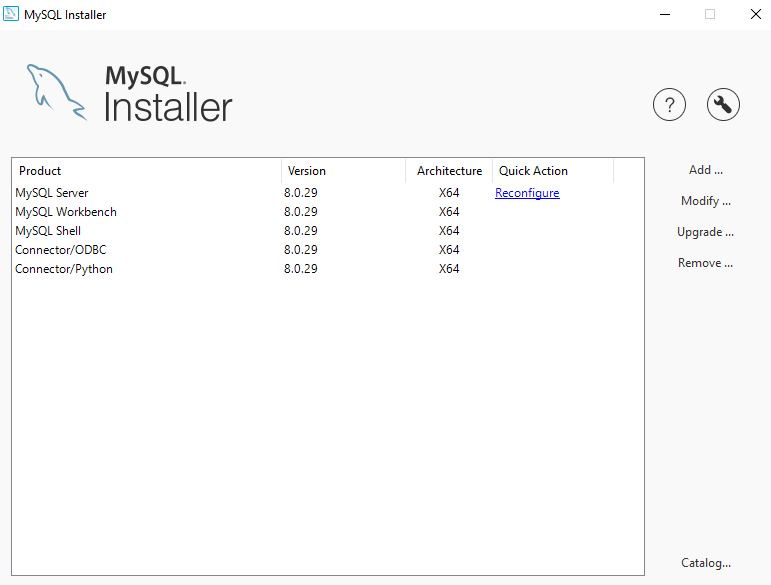


# **MySql Download & installation:**

1. **Please download Python from** [**https://dev.mysql.com/downloads/installer/**](https://dev.mysql.com/downloads/installer/)



1. **Please use the custom installation add the following feature manually**



1. **Please go to the command line and execute the following---**

Microsoft Windows [Version 10.0.19043.1706]

(c) Microsoft Corporation. All rights reserved.

C:\Users\user>cd C:\Program Files\MySQL\MySQL Server 8.0\bin

C:\Program Files\MySQL\MySQL Server 8.0\bin>mysql -u root -p

Enter password: \*\*\*\*

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 165

Server version: 8.0.29 MySQL Community Server - GPL

Copyright (c) 2000, 2022, Oracle and/or its affiliates.

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affiliates. Other names may be trademarks of their respective

owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> drop database if exists book\_application;

Query OK, 7 rows affected (0.23 sec)

mysql> create database book\_application;

Query OK, 1 row affected (0.01 sec)

mysql> use book\_application;

Database changed

mysql>

mysql> drop table if exists author;

Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql> drop table if exists publisher;

Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql> drop table if exists reviews;

Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql> drop table if exists checkouts;

Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql> drop table if exists addresses;

Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql> drop table if exists users;

Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql> drop table if exists books;

Query OK, 0 rows affected, 1 warning (0.01 sec)

mysql> show tables;

Empty set (0.00 sec)

mysql>

mysql> CREATE TABLE users (

-> user\_id INT NOT NULL AUTO\_INCREMENT,

-> name varchar(30) NOT NULL,

-> enabled BOOLEAN,

-> last\_login timestamp DEFAULT CURRENT\_TIMESTAMP,

-> PRIMARY KEY (user\_id)

-> );

Query OK, 0 rows affected (0.03 sec)

mysql> CREATE TABLE addresses (

-> id integer NOT NULL AUTO\_INCREMENT,

-> user\_id integer,

-> street varchar(30),

-> city varchar(30),

-> country varchar(30) NOT NULL,

-> PRIMARY KEY (id),

-> FOREIGN KEY (user\_id)

-> REFERENCES users (user\_id)

-> ON DELETE CASCADE

-> );

Query OK, 0 rows affected (0.06 sec)

mysql> CREATE TABLE author (

-> author\_id INT NOT NULL AUTO\_INCREMENT,

-> author\_name varchar(255),

-> author\_dob DATE,

-> author\_details varchar(100),

-> PRIMARY KEY (author\_id)

-> );

Query OK, 0 rows affected (0.03 sec)

mysql> CREATE TABLE publisher (

-> publisher\_id INT NOT NULL AUTO\_INCREMENT,

-> publisher\_name varchar(255),

-> publisher\_address varchar(255),

-> publisher\_phone varchar(255),

-> PRIMARY KEY (publisher\_id)

-> );

Query OK, 0 rows affected (0.03 sec)

mysql> CREATE TABLE books (

-> id INT NOT NULL AUTO\_INCREMENT,

-> title varchar(100) NOT NULL,

-> author\_id INT NOT NULL,

-> publisher\_id INT NOT NULL,

-> published\_date DATE,

-> isbn char(12),

-> PRIMARY KEY (id),

-> UNIQUE (isbn),

-> FOREIGN KEY (author\_id)

-> REFERENCES books(id)

-> ON DELETE CASCADE

-> );

Query OK, 0 rows affected (0.08 sec)

mysql> CREATE TABLE reviews (

-> id INT NOT NULL AUTO\_INCREMENT,

-> book\_id integer NOT NULL,

-> reviewer\_name varchar(255),

-> content varchar(255),

-> rating integer,

-> published\_date timestamp DEFAULT CURRENT\_TIMESTAMP,

-> PRIMARY KEY (id),

-> FOREIGN KEY (book\_id)

-> REFERENCES books(id)

-> ON DELETE CASCADE

-> );

Query OK, 0 rows affected (0.07 sec)

mysql> CREATE TABLE checkouts (

-> id INT NOT NULL AUTO\_INCREMENT,

-> user\_id int NOT NULL,

-> book\_id int NOT NULL,

-> checkout\_date timestamp,

-> return\_date timestamp,

-> PRIMARY KEY (id),

-> FOREIGN KEY (user\_id) REFERENCES users(user\_id)

-> ON DELETE CASCADE,

-> FOREIGN KEY (book\_id) REFERENCES books(id)

-> ON DELETE CASCADE

-> );

Query OK, 0 rows affected (0.09 sec)

mysql>

mysql> show tables;

+----------------------------+

| Tables\_in\_book\_application |

+----------------------------+

| addresses |

| author |

| books |

| checkouts |

| publisher |

| reviews |

| users |

+----------------------------+

7 rows in set (0.00 sec)

mysql>

mysql> INSERT INTO users(name,enabled, last\_login) VALUES ("ok",TRUE,CURRENT\_TIMESTAMP);

Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO addresses(user\_id, street, city, country) VALUES (1,"ok","ok","ok");

Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO author(author\_name, author\_dob, author\_details) VALUES ("ok","1990-12-12","okok");

Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO publisher(publisher\_name, publisher\_address, publisher\_phone) VALUES ("publisher\_name","publisher\_address","93458394584");

Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO books(title, author\_id,publisher\_id,published\_date, isbn) VALUES ("Python Programming",1,1,"2020-12-12","283485883458");

Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO reviews(book\_id, reviewer\_name, content, rating,published\_date) VALUES (1,"sanjoy","ok",4,CURRENT\_TIMESTAMP);

Query OK, 1 row affected (0.01 sec)

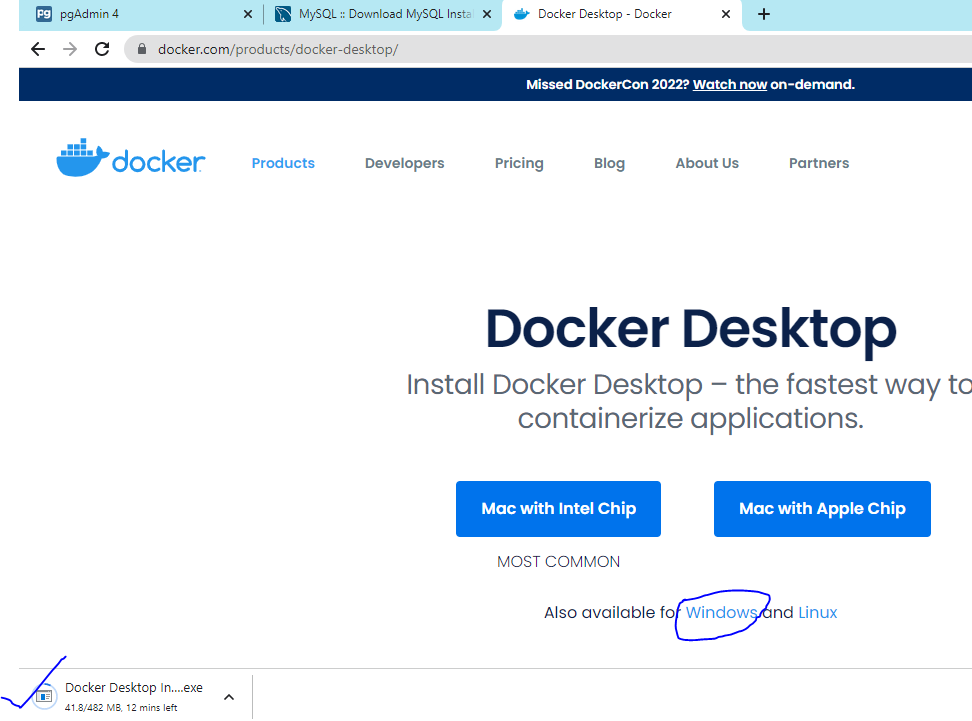
mysql> INSERT INTO checkouts (user\_id, book\_id, checkout\_date, return\_date) VALUES (1,1,"2020-12-12","2020-12-30");

Query OK, 1 row affected (0.01 sec)

mysql>

# **Docker download and installation:**

1. **Please download Docker from** [**https://www.docker.com/products/docker-desktop/**](https://www.docker.com/products/docker-desktop/)



1. **Please execute the “Docker Desktop Installer.exe” default way**

# **Postgres & Pgadmin4 environment setup:**

1. **Postgresql setup:**

Install PostGre docker pull postgres:latest

docker run --name pgsql -p 5432:5432 -e POSTGRES\_PASSWORD=pass -d postgressql

1. **pgadmin4 setup:**

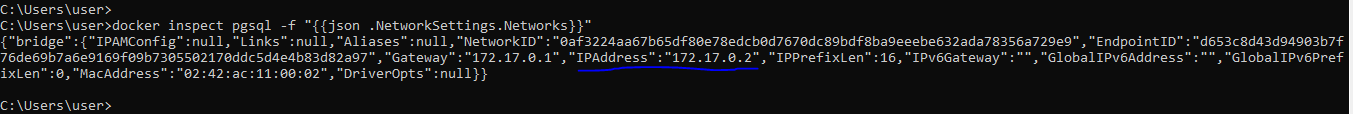
docker pull dpage/pgadmin4:latest

docker run --name dev-pgadmin -p 5050:80 -e "PGADMIN\_DEFAULT\_EMAIL=sanjoy@gmail.com" -e "PGADMIN\_DEFAULT\_PASSWORD=pass" -d dpage/pgadmin4

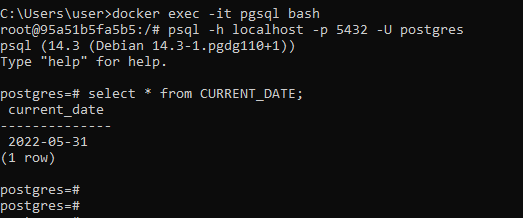
1. **get IP:**

docker inspect pgsql -f "{{json .NetworkSettings.Networks}}"

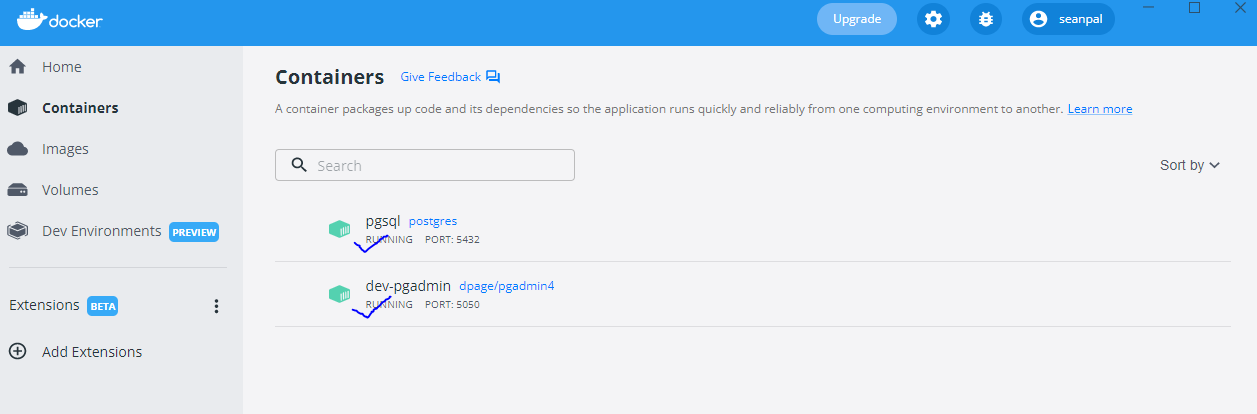
172.17.0.2



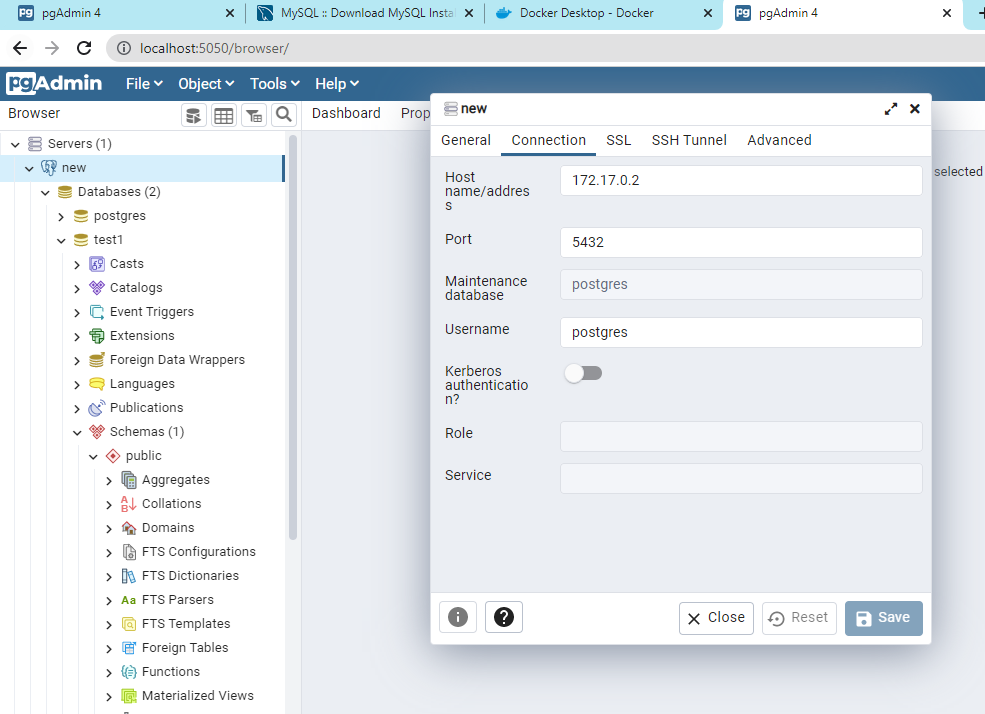
1. **please check postgres installed successfully or not.**



1. please check docker installed successfully or not.



1. Please go to the <http://localhost:5050/browser/> and connect with the following information



# **Python File:**



1. C:\Users\user>python F:\create\_table\_postgres.py

This python py file will create required table in selected database.

1. C:\Users\user>python F:\MySql\_to\_Postgres.py

This python py file will migrate all tables data from MySQL to postgres

# **MySQL to Postgres migration:**

C:\Users\user>

C:\Users\user>python F:\script\_pathao\create\_table\_postgres.py

TABLE CREATED SUCCESSFULLY

C:\Users\user>python F:\script\_pathao\MySql\_to\_Postgre.py

create table addresses (id int8,user\_id int8,street varchar(30),city varchar(30),country varchar(30))

Record no- 1

create table author (author\_id int8,author\_name varchar(255),author\_dob date,author\_details varchar(100))

Record no- 1

create table books (id int8,title varchar(100),author\_id int8,publisher\_id int8,published\_date date,isbn char(12))

Record no- 1

create table checkouts (id int8,user\_id int8,book\_id int8,checkout\_date timestamp,return\_date timestamp)

Record no- 1

create table publisher (publisher\_id int8,publisher\_name varchar(255),publisher\_address varchar(255),publisher\_phone varchar(255))

Record no- 1

create table reviews (id int8,book\_id int8,reviewer\_name varchar(255),content varchar(255),rating int8,published\_date timestamp)

Record no- 1

create table users (user\_id int8,name varchar(30),enabled int8,last\_login timestamp)

Record no- 1

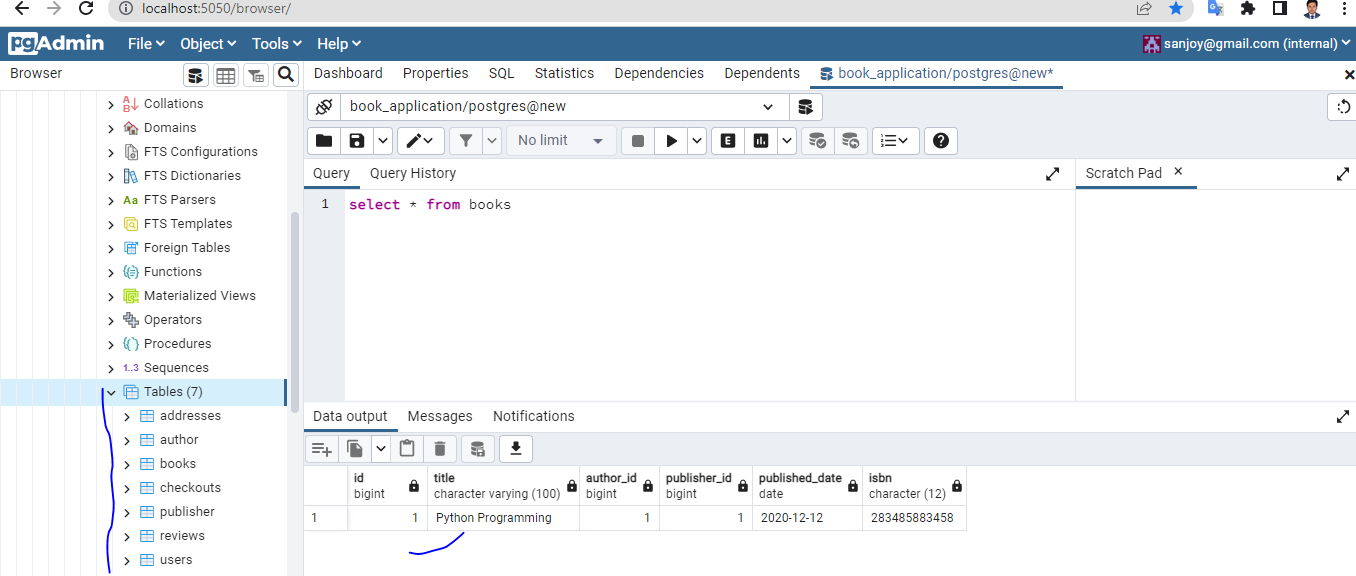
C:\Users\user>



**Table created and migrated successfully**

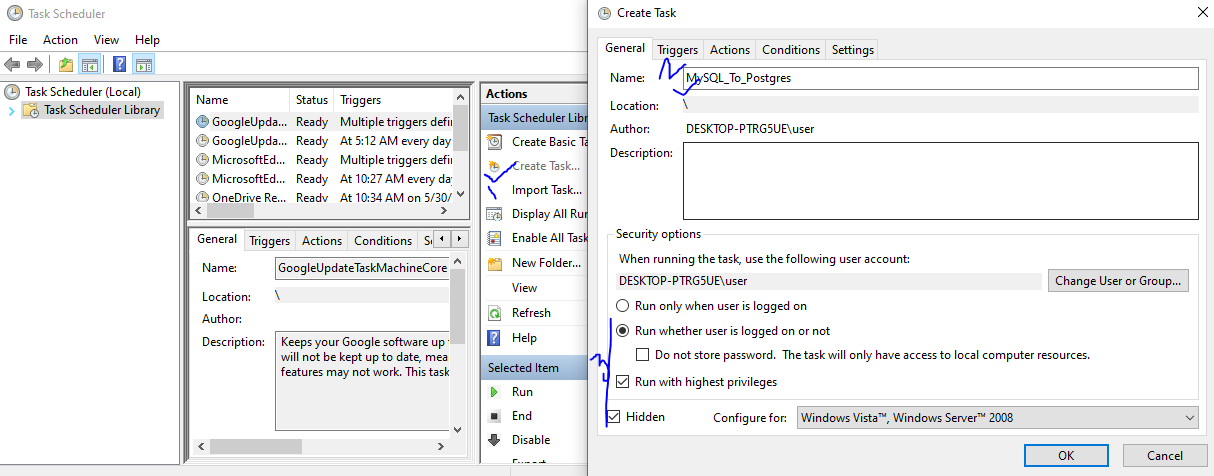
**Please go to the following link to connect pgadmn4**

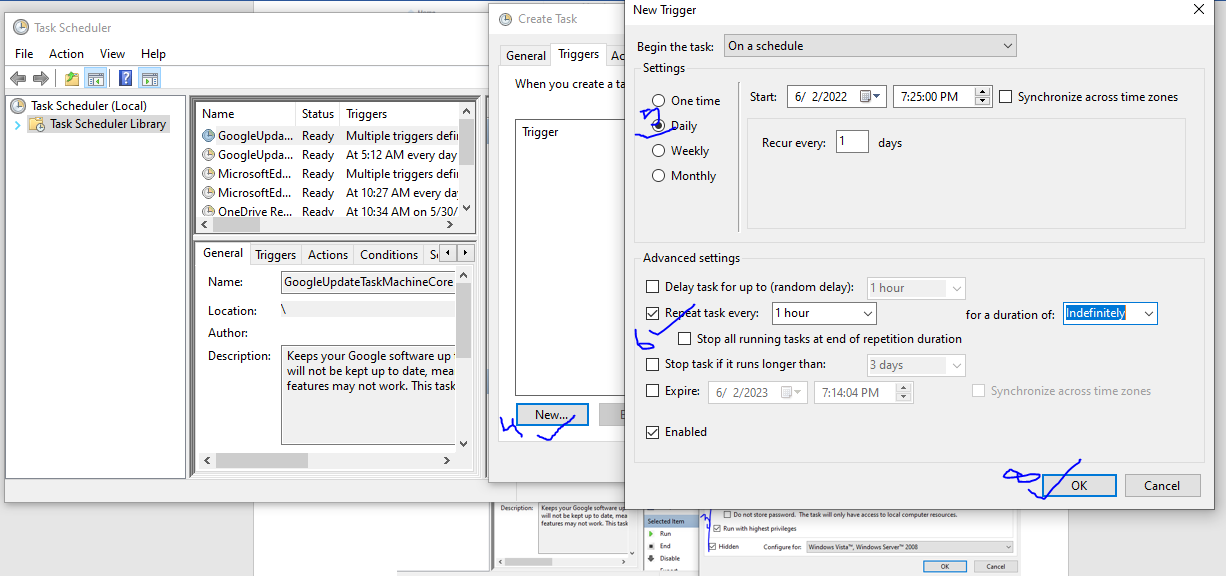
<http://localhost:5050/>

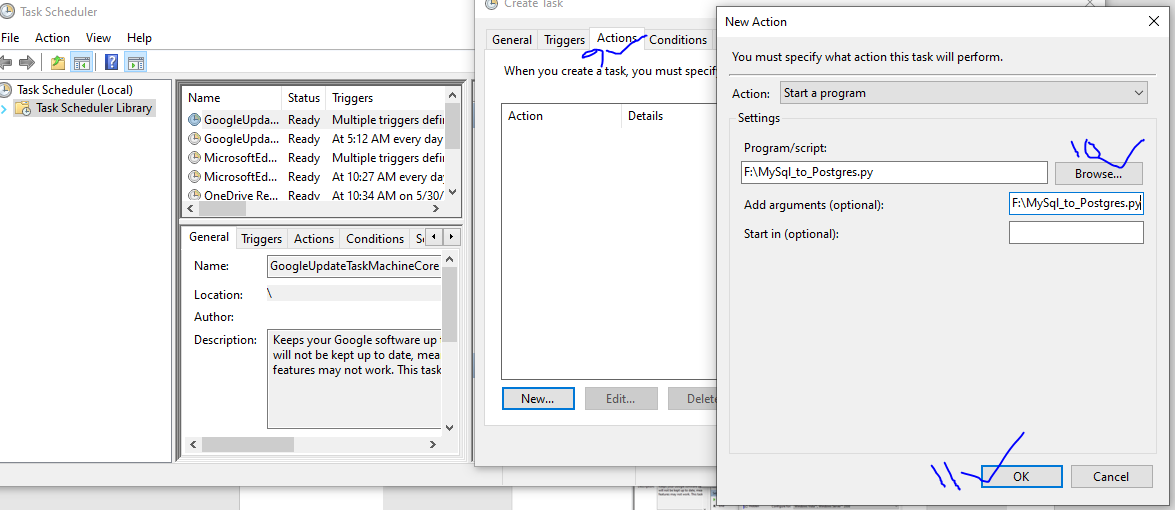


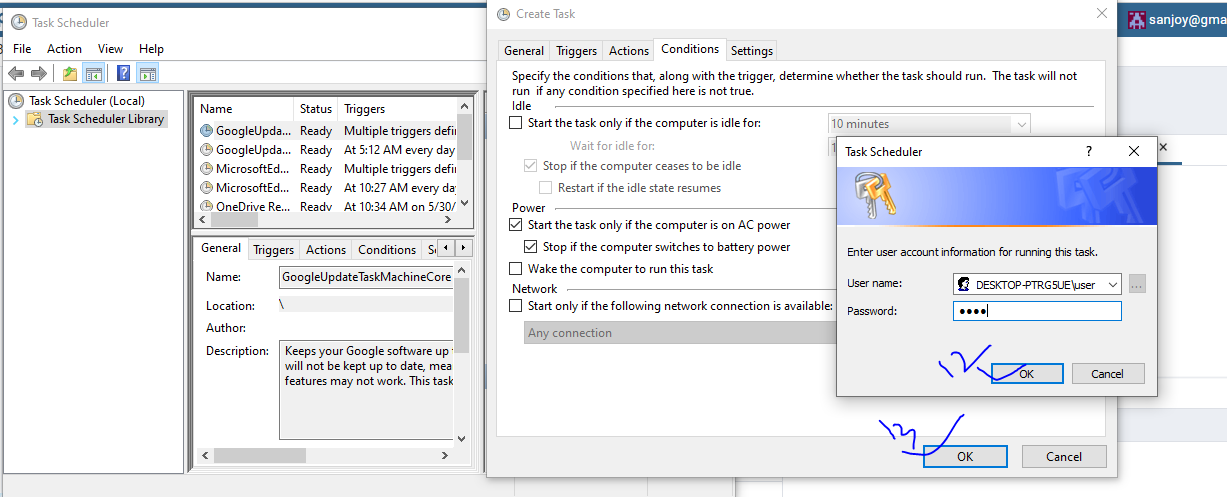
# **Scheduling the Python Job “MySql\_to\_Postgres.py” in Windows Task Scheduler**

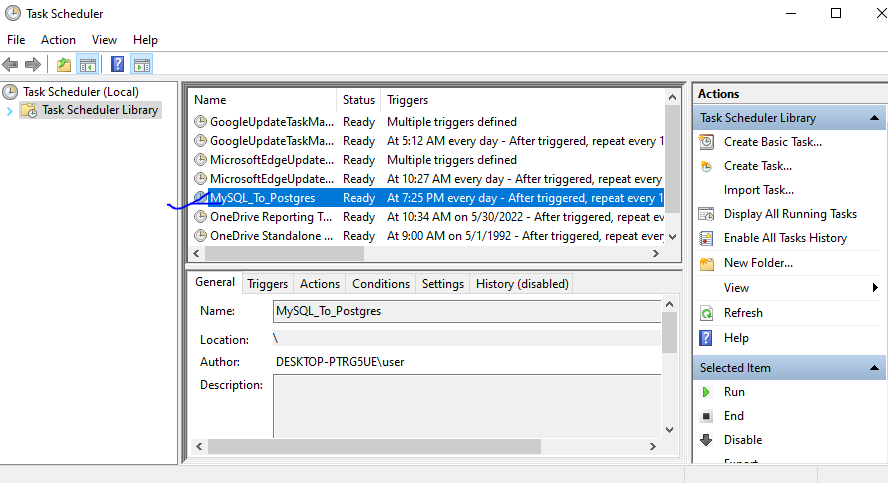
**In serach box click "Task Scheduler"🡪 Then Click “Create Task” 🡪**









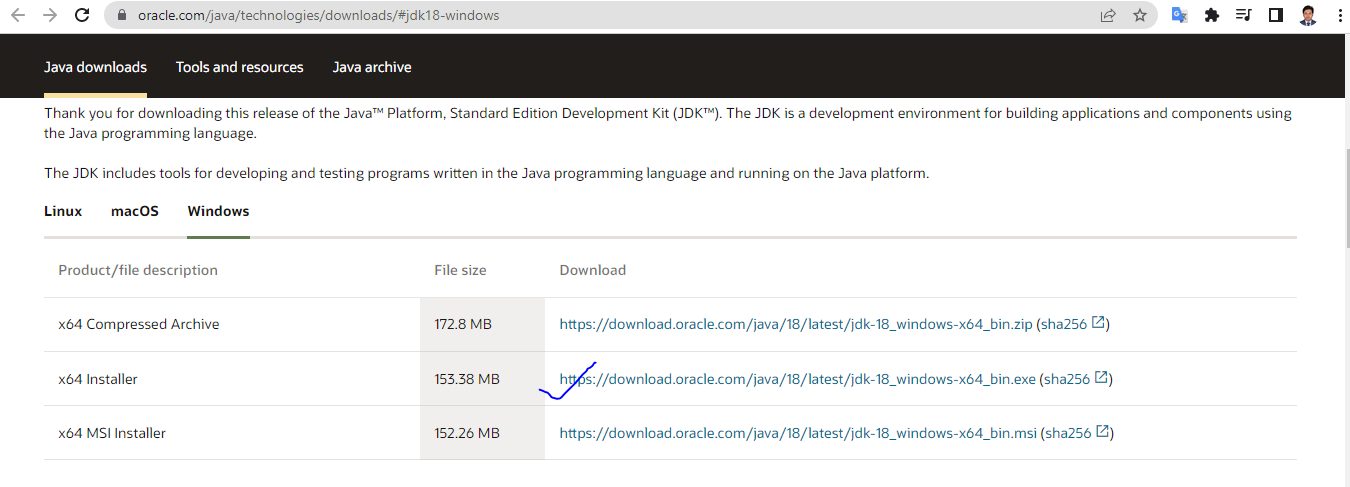


# **Java Download & installation:**

Please download Java from

[**https://www.oracle.com/java/technologies/downloads/#jdk18-windows**](https://www.oracle.com/java/technologies/downloads/#jdk18-windows)

& install as default



**Checking Java version from CMD**

Microsoft Windows [Version 10.0.19043.1706]

(c) Microsoft Corporation. All rights reserved.

**C:\Users\user>java --version**

java 18.0.1.1 2022-04-22

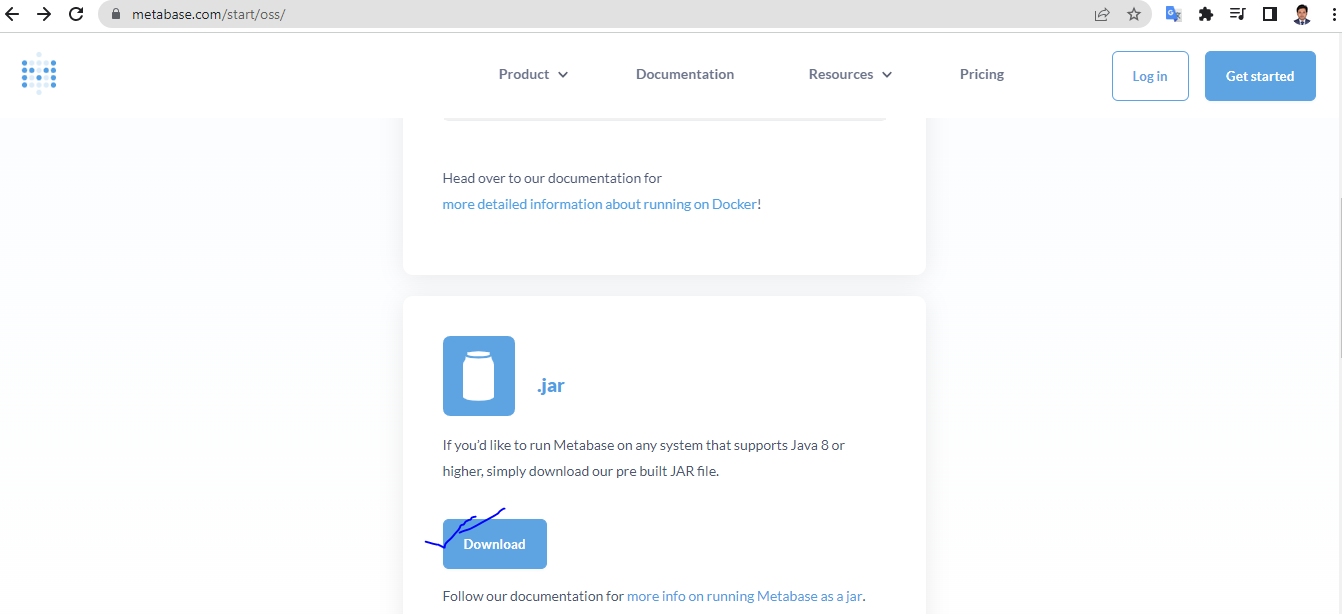
Java(TM) SE Runtime Environment (build 18.0.1.1+2-6)

Java HotSpot(TM) 64-Bit Server VM (build 18.0.1.1+2-6, mixed mode, sharing)

# **Metabase Jar File Download & Setup:**

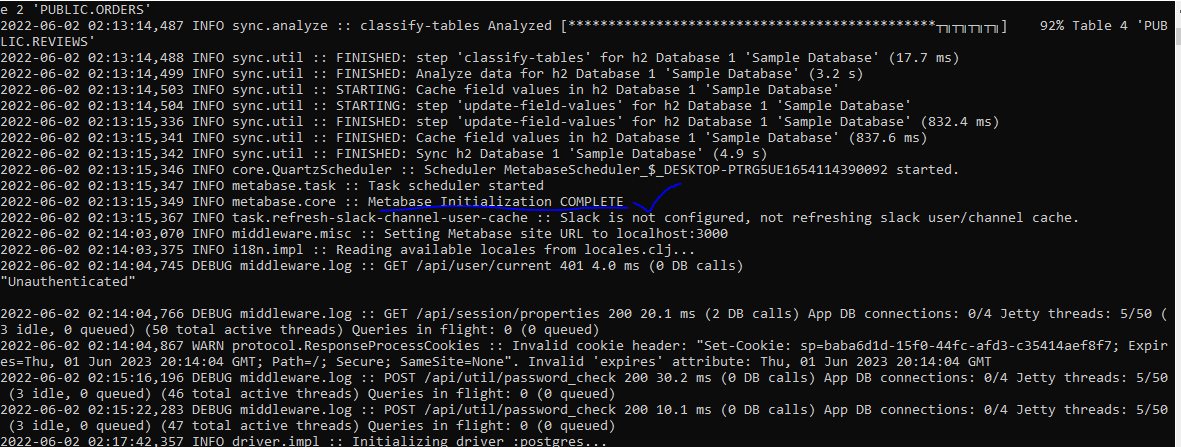
Please download Metabase Jar from

[**https://www.metabase.com/start/oss/**](https://www.metabase.com/start/oss/)



**Then please go to cmd and run the following command----**

**C:\Users\user>java -jar F:\metabase\metabase.jar**



**After Successful installation Please run the following link in browser----**

[**http://localhost:3000/**](http://localhost:3000/)

**Then connected Postgresql with the following information**

**host = 'localhost',**

**dbname = 'book\_application',**

**user = 'postgres',**

**password = 'pass',**

**port = 5432**

