

# How to Install

## Using Pycharm(Easiest)

Download PyCharm from the JetBrains website. Use this link:

<https://www.jetbrains.com/help/pycharm/managing-dependencies.html> to install the required packages for this project in the file requirements.txt

## Using Ubuntu/WSL

Create a virtual environment(not required but good practice). Once you activate the virtual environment, in your project folder, run

```
pip install -r requirements.txt
```

## Setup Database

You need to install mysql-server. Follow any web tutorial for the same. Once you have it setup you should be able to run

```
sudo mysql < database.sql
```

After this you need to update the constants.py file to the username and password for mysql.

Alternatively, you can open the database.sql file in MySQL workbench and run the sql file. You can also run your queries on the workbench to test them locally.

## How to Run Queries Only

You can run the file "queries.py" directly from the terminal using "python3 queries.py" or by clicking the run button on PyCharm. The file has a sample query provided. To evaluate one of your queries, scroll to the last two lines of the file.

```
cursor.execute(query1)
print(cursor.fetchall())
```

Here replace query1 in the first line with the query you want to evaluate and re-run the file. By default, the file will run query1 as shown.

## How to run test framework

To run the test framework fill in your expressions in the file "queries.py"(don't forget to uncomment the expression by removing the leading "#") and then run "python3 run\_tests.py" This will pass your queries against the sample database and return Errors or pass values depending on the correctness of your query. Note that passing a test case locally does not mean it will pass on Gradescope against the hidden dataset as your query could be hardcoded or have some other inaccuracy.

## Submitting on Gradescope

You only need to submit the `queries.py` file to Gradescope.