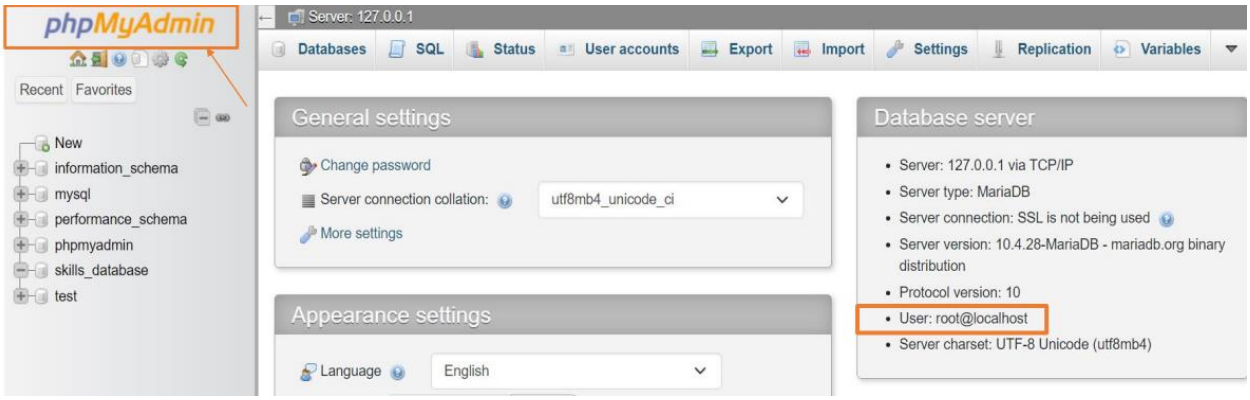
Developer's Guide

1- Application used to create the dataset:

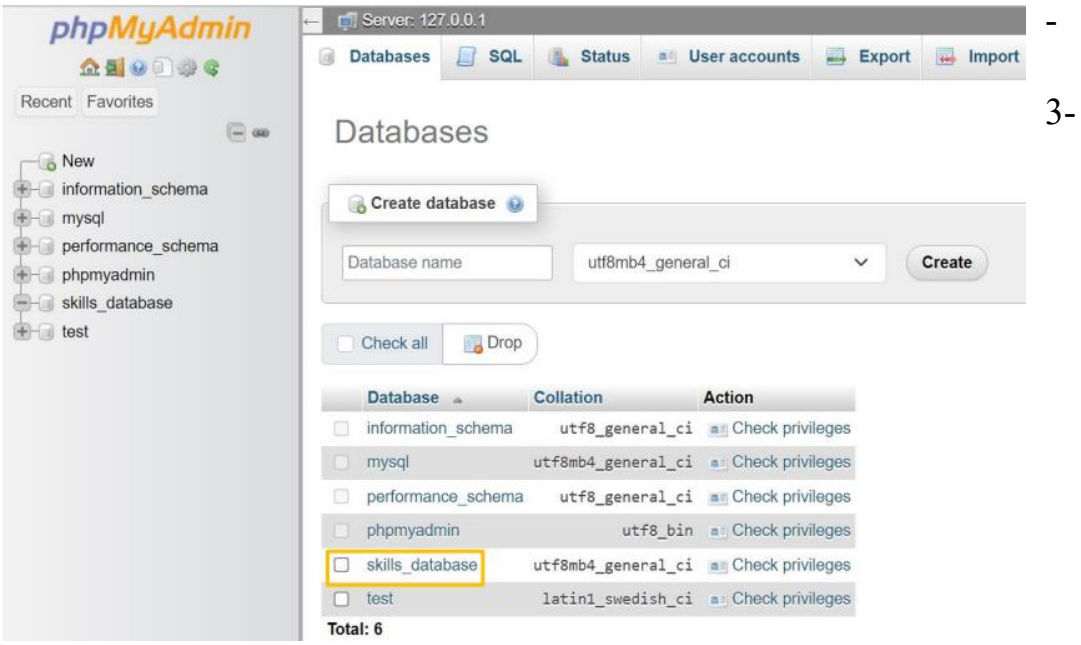
- PHPMyAdmin was used to build the dataset as we were able to create the tables there and connect them together.
- By clicking on the logo of PHPMyAdmin following page appears.



- To determine the username and host name, it appears on the database server box on the user line where the user name is what appears before the @ sign which is root and the host name is what's after the @ sign which is localhost.

2- Creating database:

- By clicking on the database tab, we type the database name and click create. Here our created database is called skills_database.



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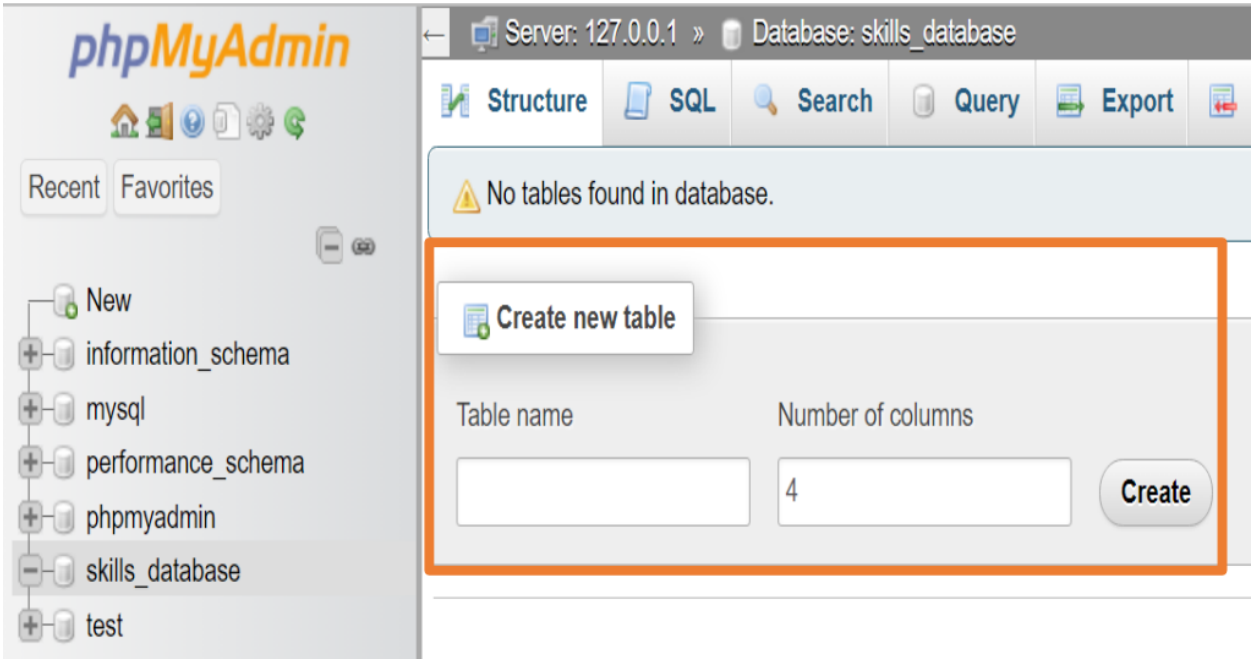
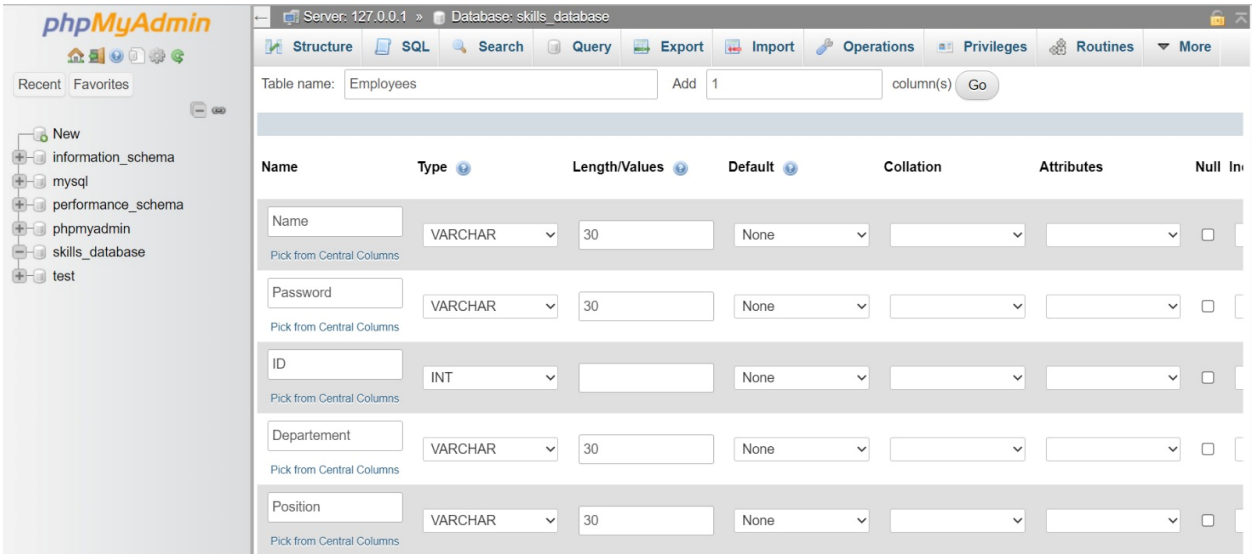
3- Creating dataset:

- Here we can create the tables in this dataset by setting the table name and choosing the number of columns per table.

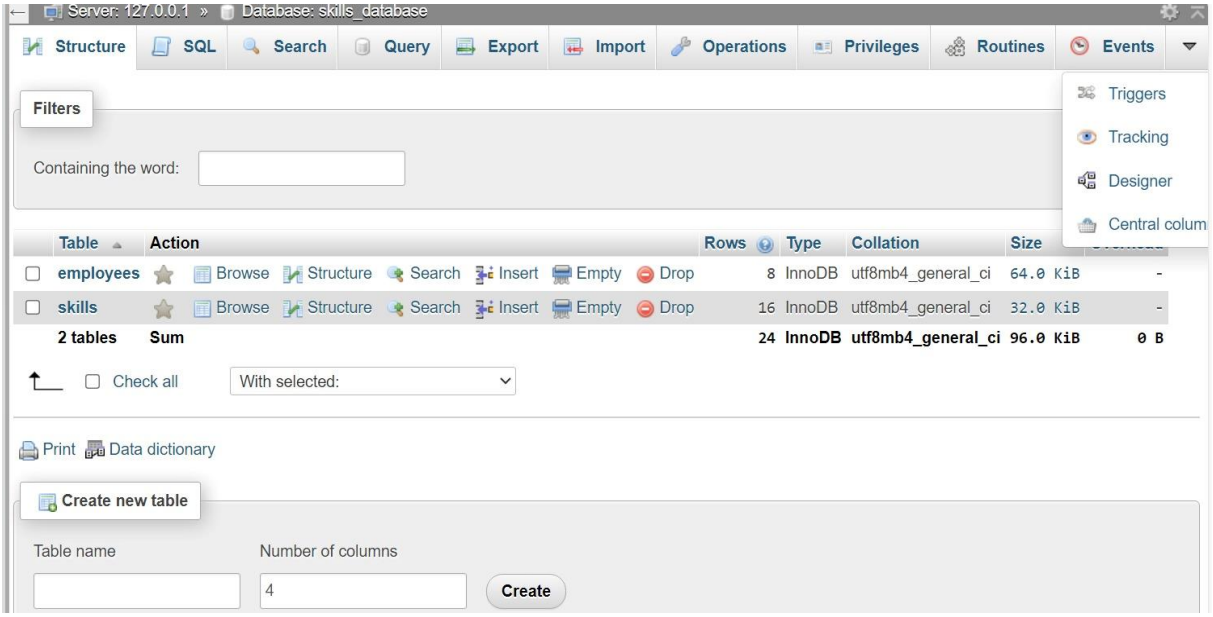


- After pressing create, the following page appears where we write the name of the heading of each column and assign the data type to be inserted in each column.



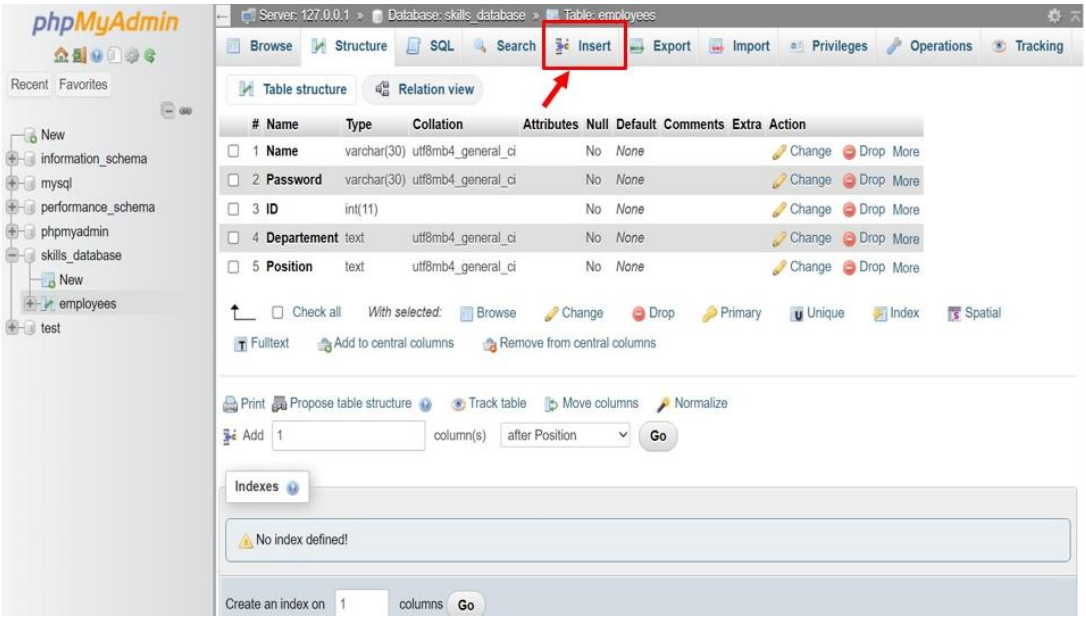
- After finishing we click GO.

- Here we created two tables (2 Entities), and we will connect them together.

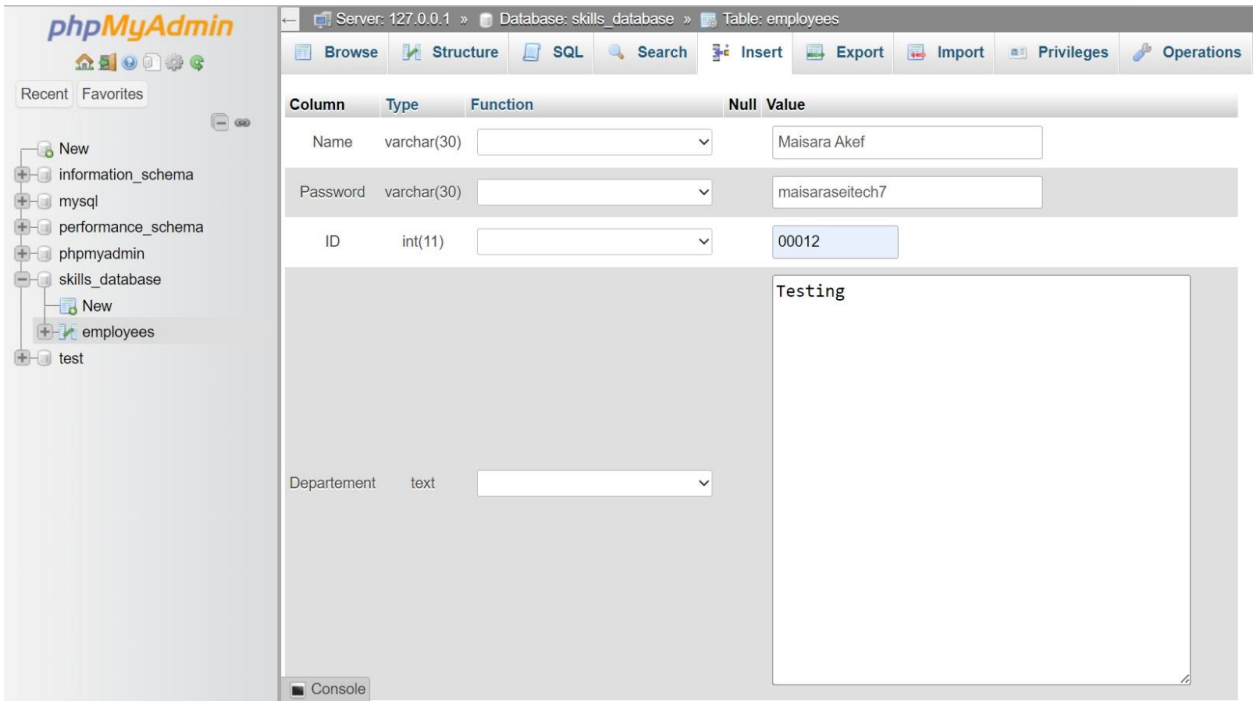


4- Inserting data in the dataset:

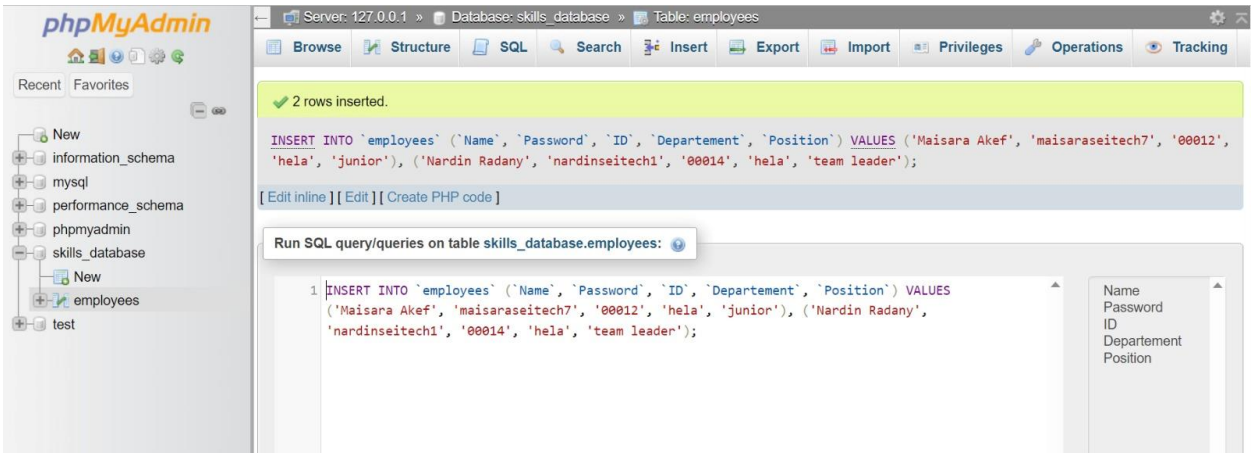
- Here appears the columns we just created, to fill these columns we click on insert and start filling the data.



- Here’s a snippet from inserting the data.



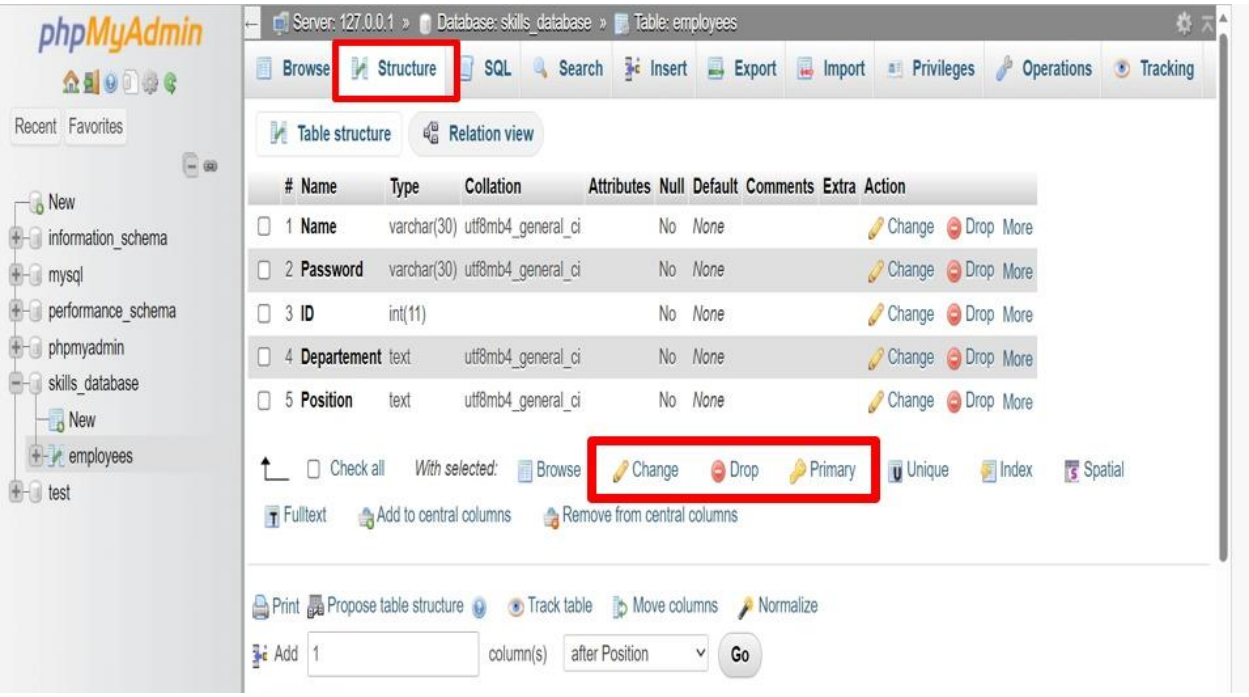
- After inserting the data, the query appears like this.



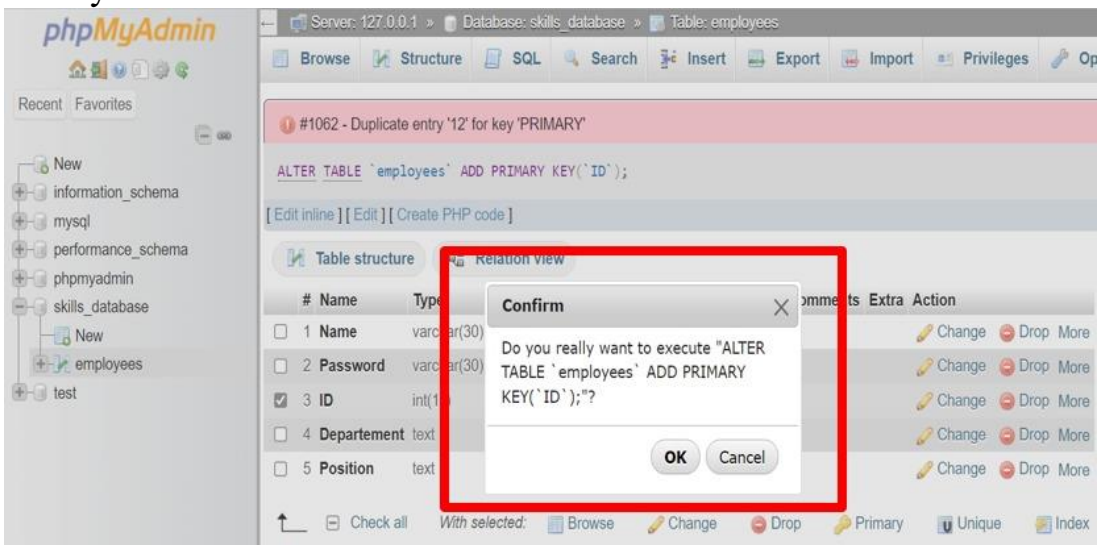
5- Creating a Primary key for each entity:

a- Click on our created database which is employee in our case then open the structure tab.

b- 3 main options are helpful which are:
Change: to change in the table.
Drop: to delete data or the whole database.
Primary: to create the primary key.

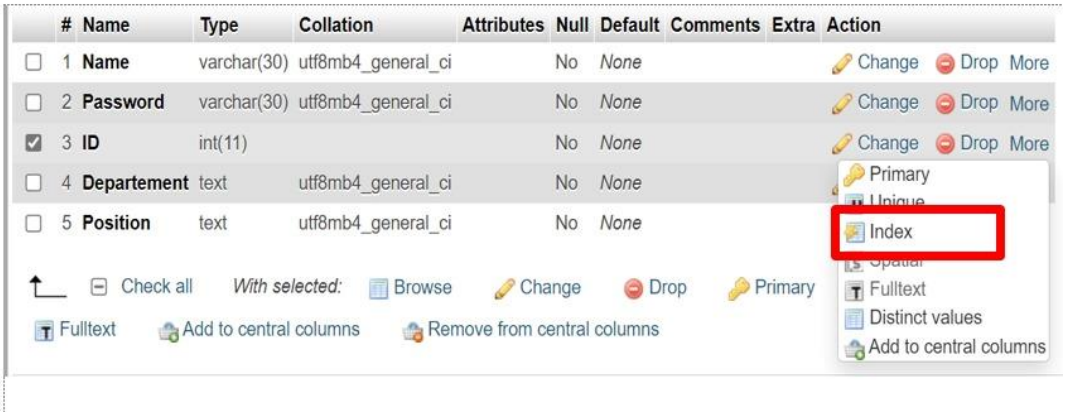


c- The thing that identifies each member is the ID, select it, in the same row select more, click on primary, and then agree that it is the primary key.



6- Creating a Foreign key for each entity:

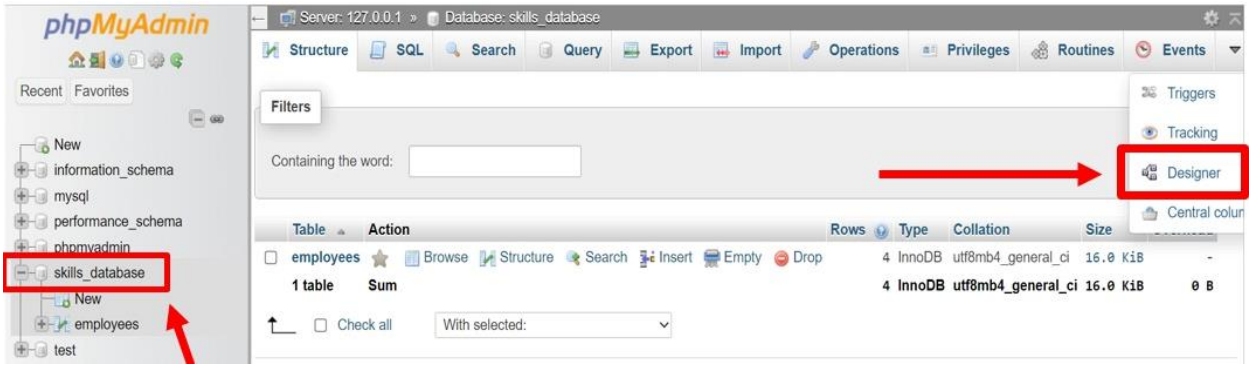
- First we choose an attribute which is one column from the created columns in the database, in our case we choose the ID attribute.
- Select it and on the same row click more then choose index.



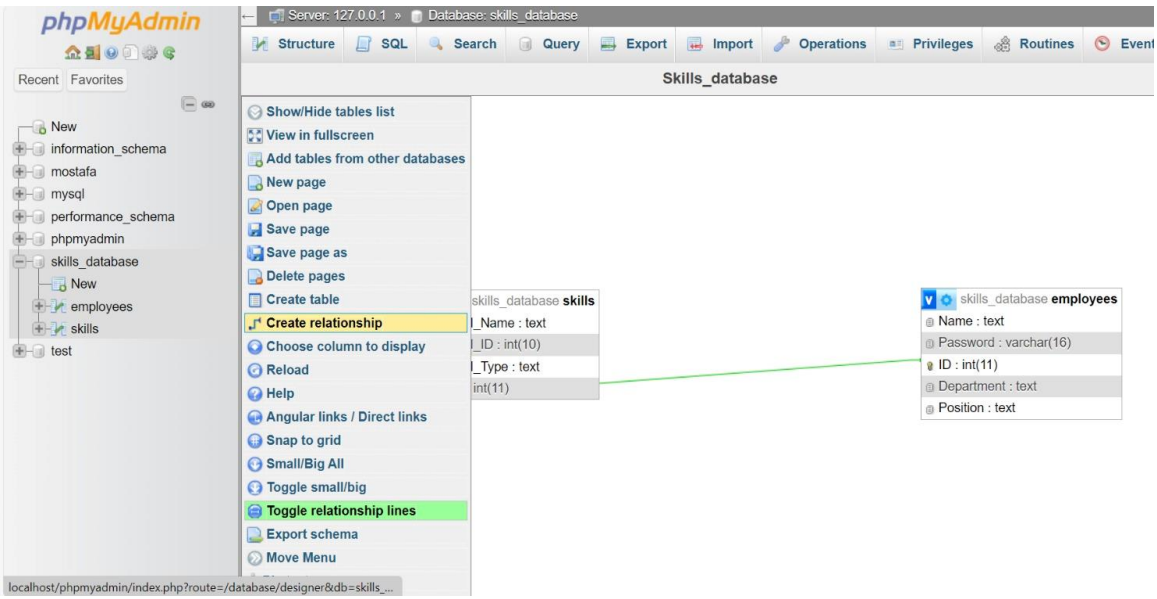
- We need to do the same thing in the other entity which is SKILLS. By repeating the same steps and seeting index for the ID column there.

7- Creating ERD:

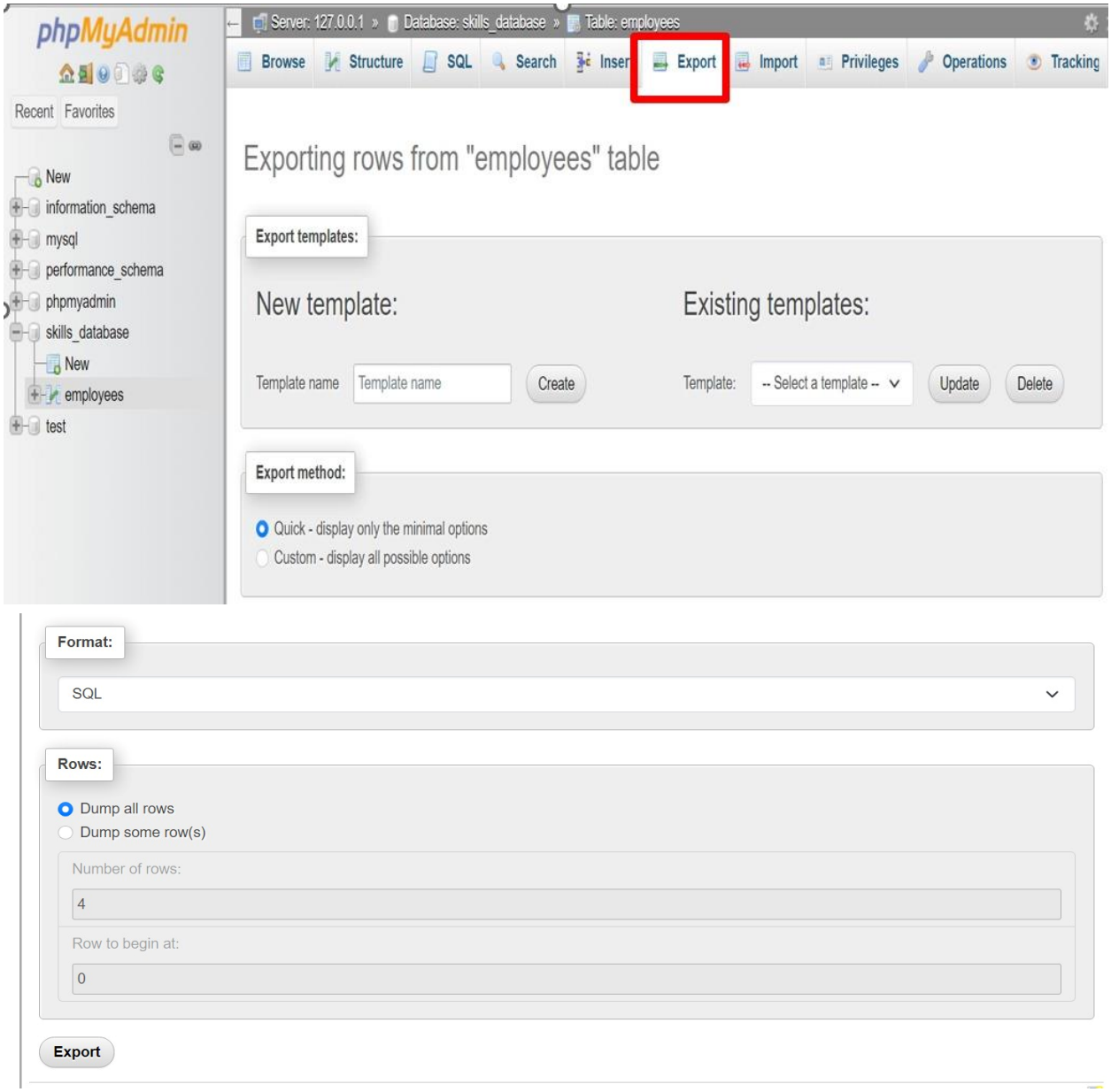
- Getting back to our database, and choosing the designer option from the arrow.



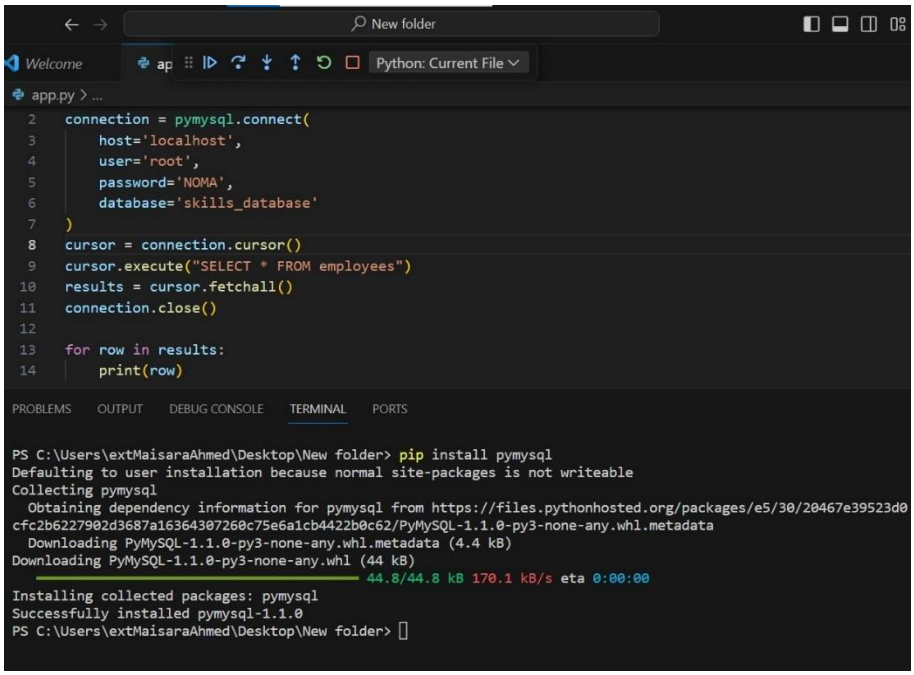
- Then our two entities (two tables) appear.
- Then choose <u>create relationship,</u> then we are asked to select the <u>foreign key</u> which is the employee ID.



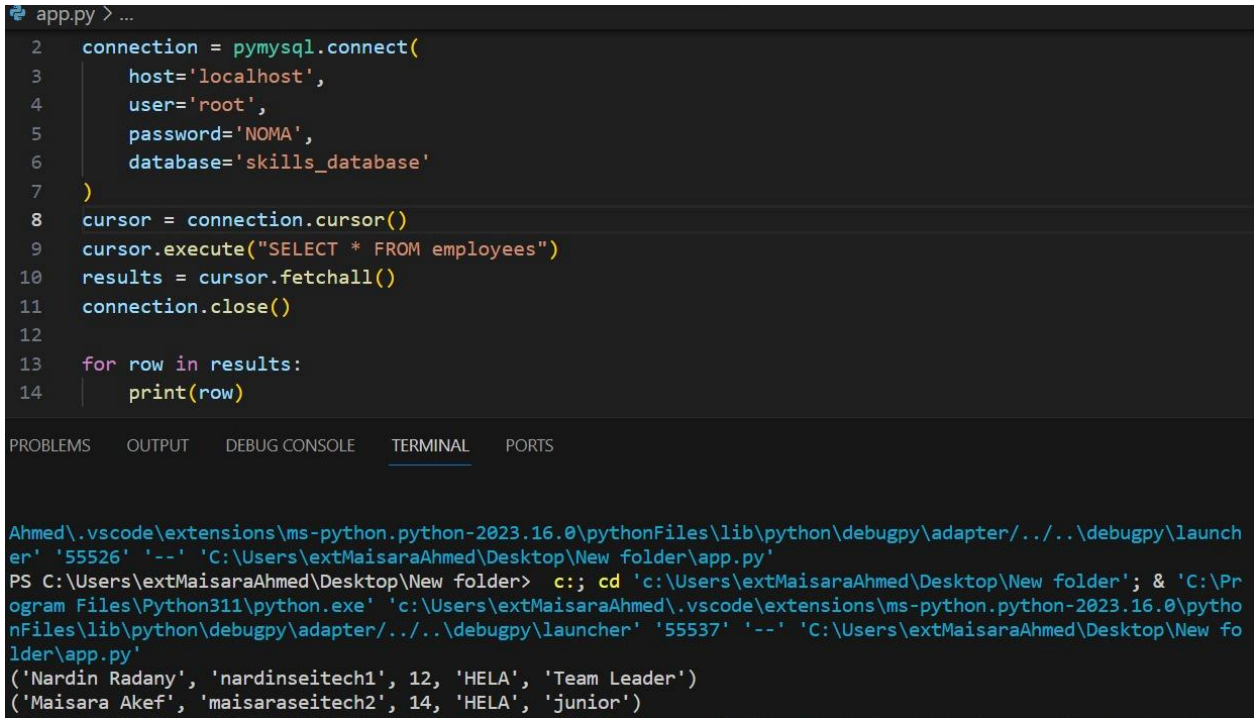
8- Exporting the SQL file:



- PHPMyAdmin is used as it can be connected easily with python as the rest of the project is built with python where:
  1- First we have to install pymysql using (pip install pymysql)



  2- second we print the result which is the content of the table to make sure the connection is done.



References: