

PYTHON CGI SCRIPTING

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TECHNOLOGY USED:



PYTHON



MYSQL

STUDENT SIGN CENTRE HEAD SIGN FACULTY SIGN

# INTRODUCTION

**Python Programming**

**Python** is an interpreted, high-level and general-purpose programming language. Python's design philosophy emphasises code readability with its notable use of significant whitespace. Its language constructs and object oriented approach aim to help programmers write clear, logical code for small and large-scale projects.

Python is dynamically typed and garbage-collected. It supports

multiple programming paradigms,

including structured (particularly, procedural), object-oriented, and functional programming. Python is often described as a "batteries included" language due to its comprehensive standard library.

## Mysql

MySQL Database Service is a fully managed database service to deploy cloudnative applications. MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter,[7] and "SQL", the abbreviation for Structured Query Language. A relational database organizes data into one or more data tables in which data types may be related to each other; these relations help structure the data. SQL is a language programmer use to create, modify and extract data from the relational database, as well as control user access to the database.

**What is tkinter Programming?**

Python offers multiple options for developing GUI (Graphical User Interface). Out of all the GUI methods, tkinter is the most commonly used method. It is a standard Python interface to the Tk GUI toolkit shipped with Python. Python with tkinter is the fastest and easiest way to create the GUI applications.

ASimple Student Management System project is written in Python. The project file contains a python script (Student.py and Ui.py). It is an important piece of software which is a must at schools and colleges. We will build a Student Management System using Tkinter to make it interactive.

At first we Have to Install MySQL server in our System to make pymysql work. Now we will connect to the server with the correct credentials associated with the MySql server installed in our system. In This Project all The Tasks Related to Database like Adding Student Records and Displays to Users, then View All the Student Records etc. has Done in **Student.py** file. In short, this project mainly focus on CRUD.

Line explanation is given in the screenshot of the code.

For the next part,

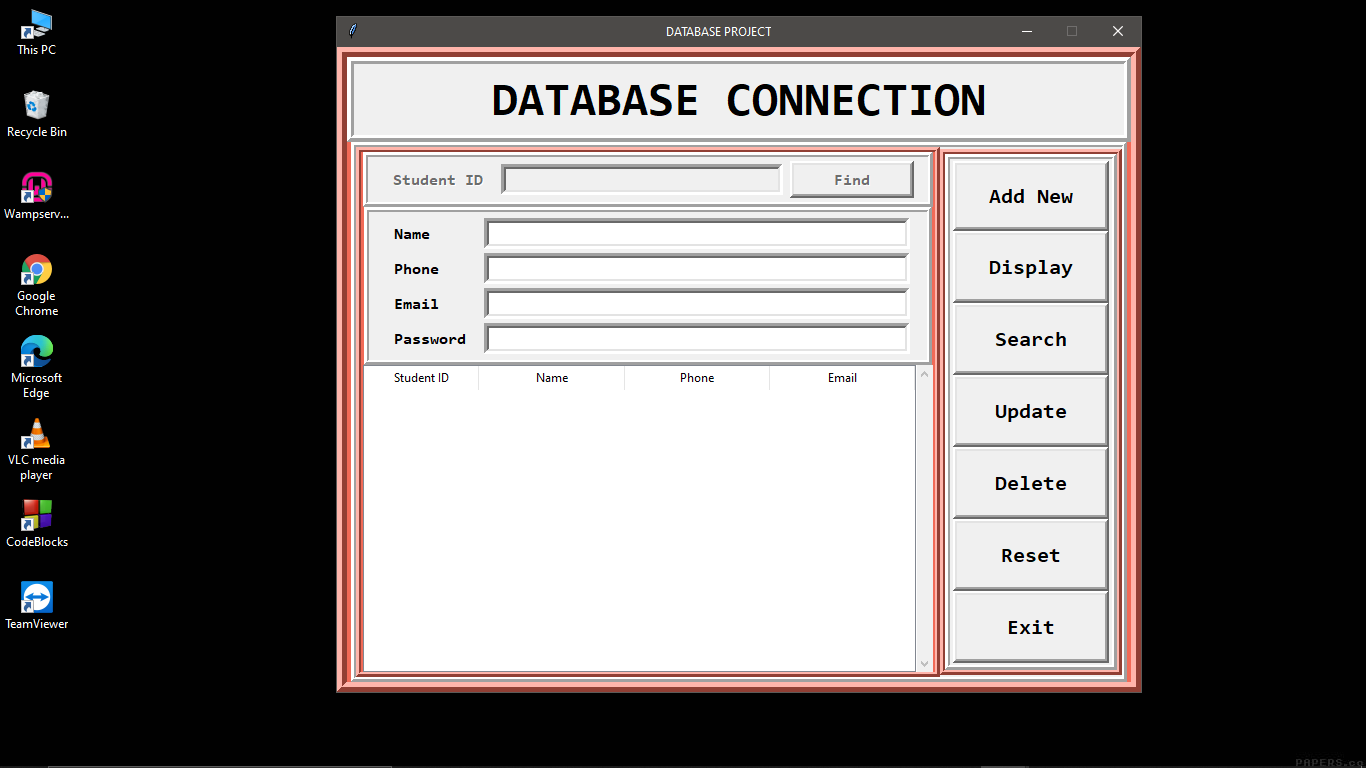
We will create a database in phpMyAdmin opened through wamp server.

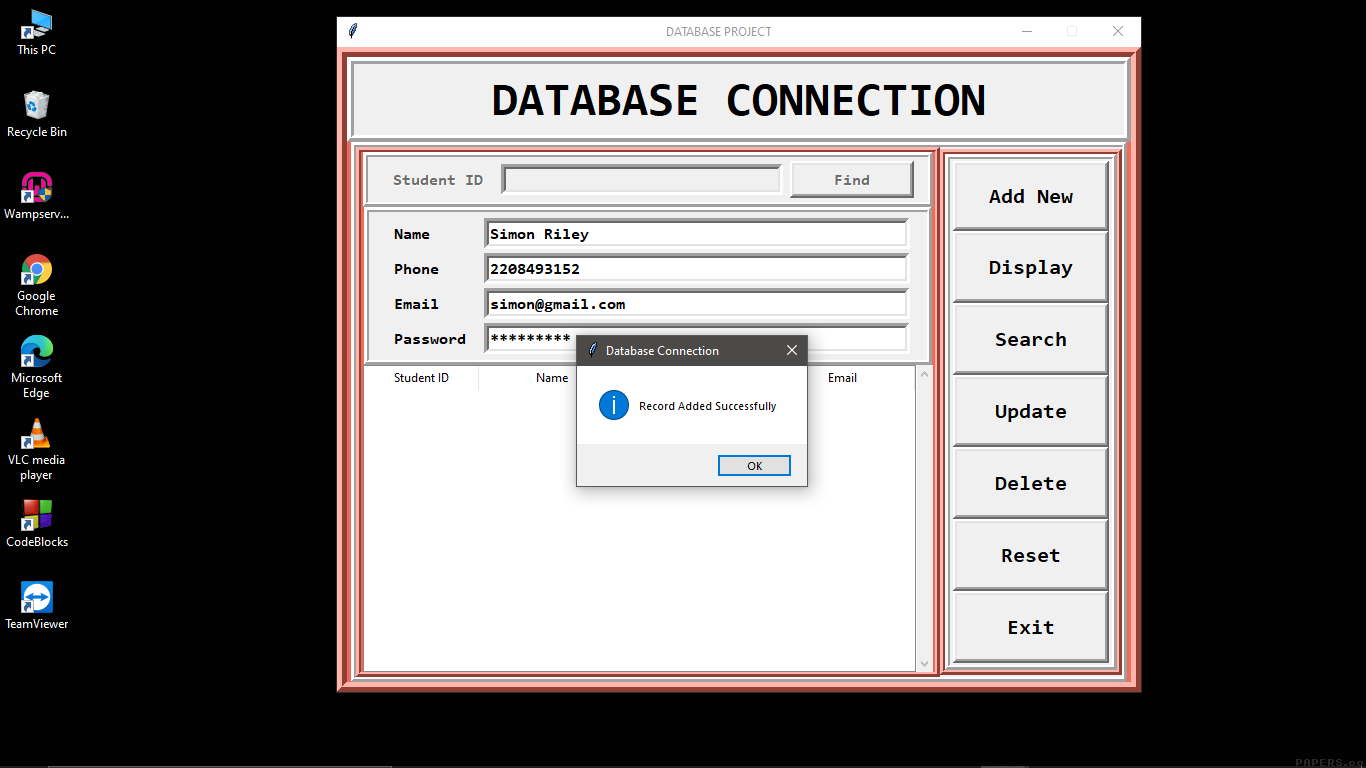
After logging in ,we will create a database by creating a table and inserting data into it.

Now after creating the database we will move to the editor for further coding.

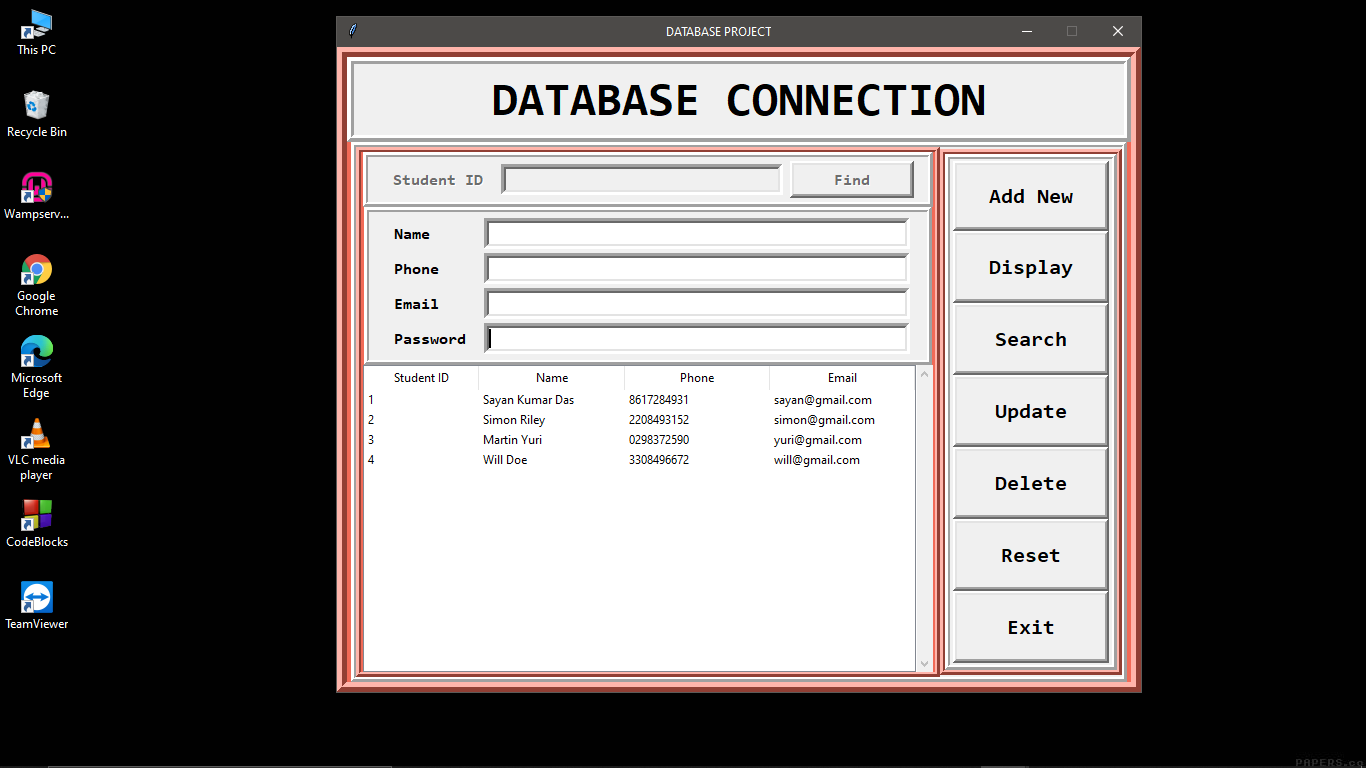
Now, To use the Tkinter we need to import the Tkinter module as well as we have imported required modules and files so that we can make function calls from our file named **Ui.py**. Then We Will Design the Project Window and Create all The Frames that required to Hold The Labels, Buttons, Entry Fields etc.

Now ‘Ui.py’ file will take NAME, PHONE, EMAIL, PASSWORD as input. For Every Button Click this **Ui.py** will refer to **Student.py** through The Methods. In Student.py we imported mysql connector so that we can connect our application to mysql database.

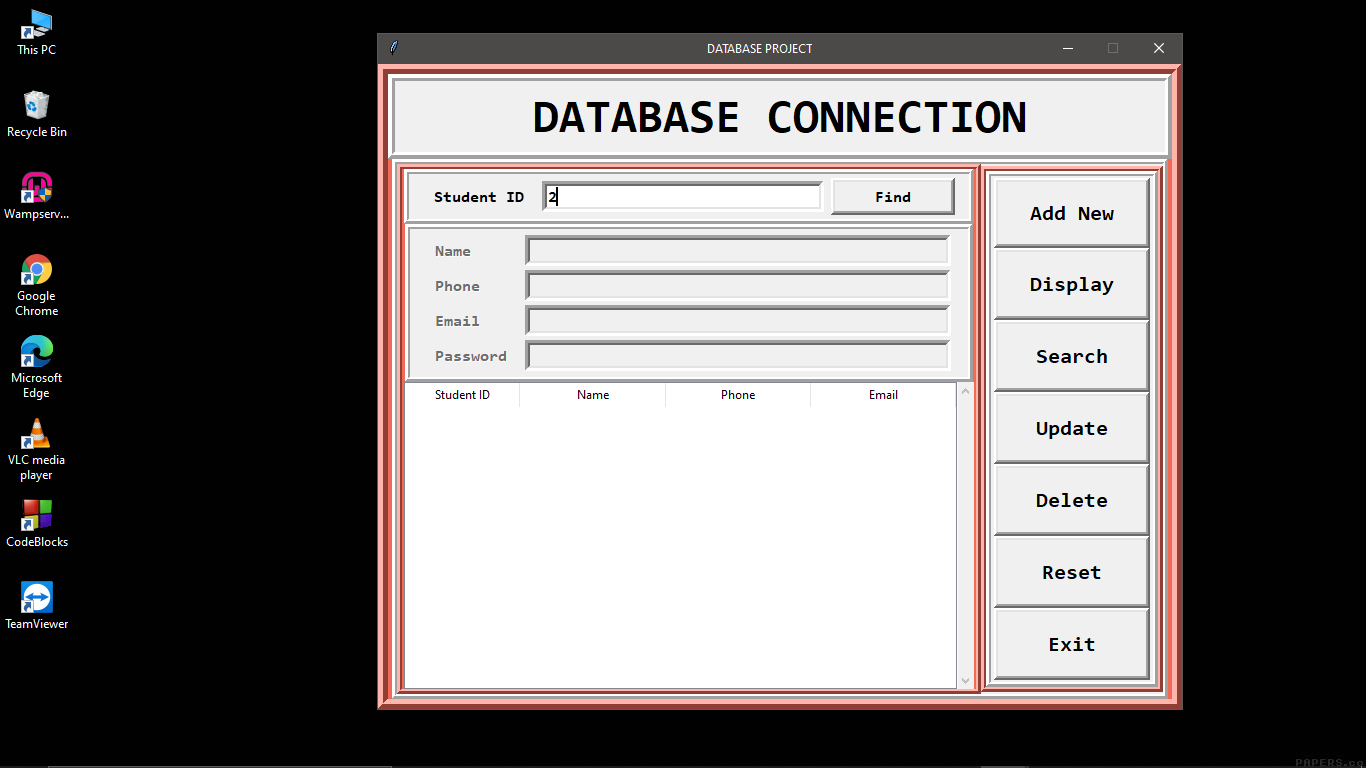


The above picture shows how Ui.py Looks Like.

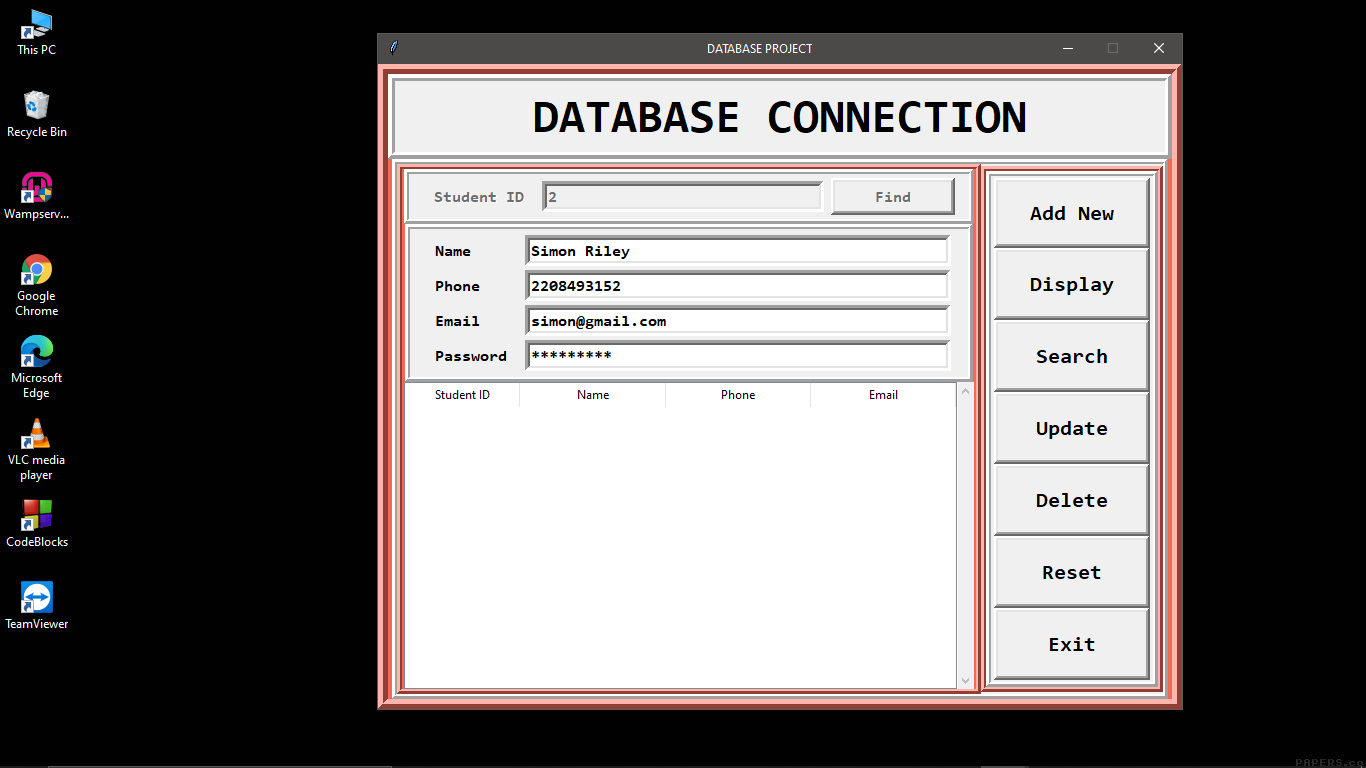
The above picture shows After Filling the Details We Press **Add New** Button, and it inserts the record into database and displays the successful message.



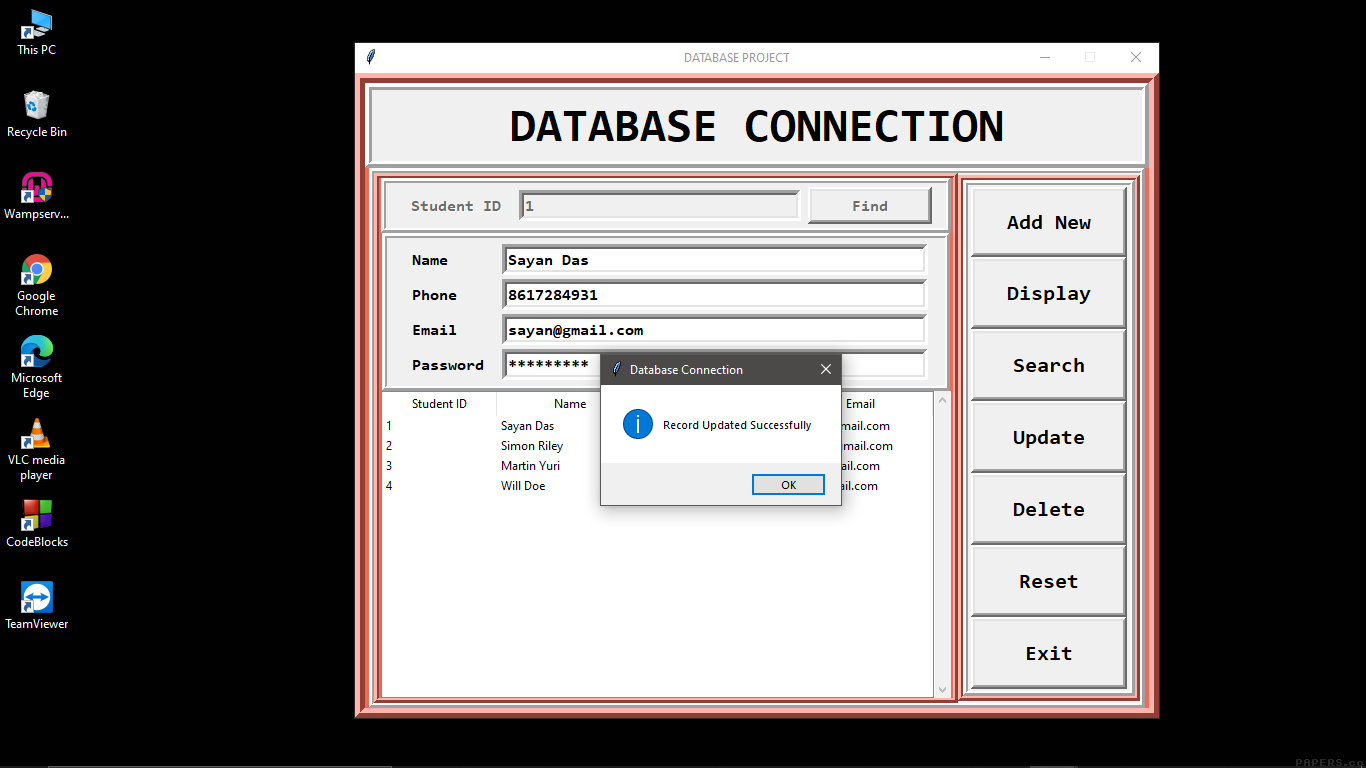
After Clicking The **Display** Button It Displays All the Records.



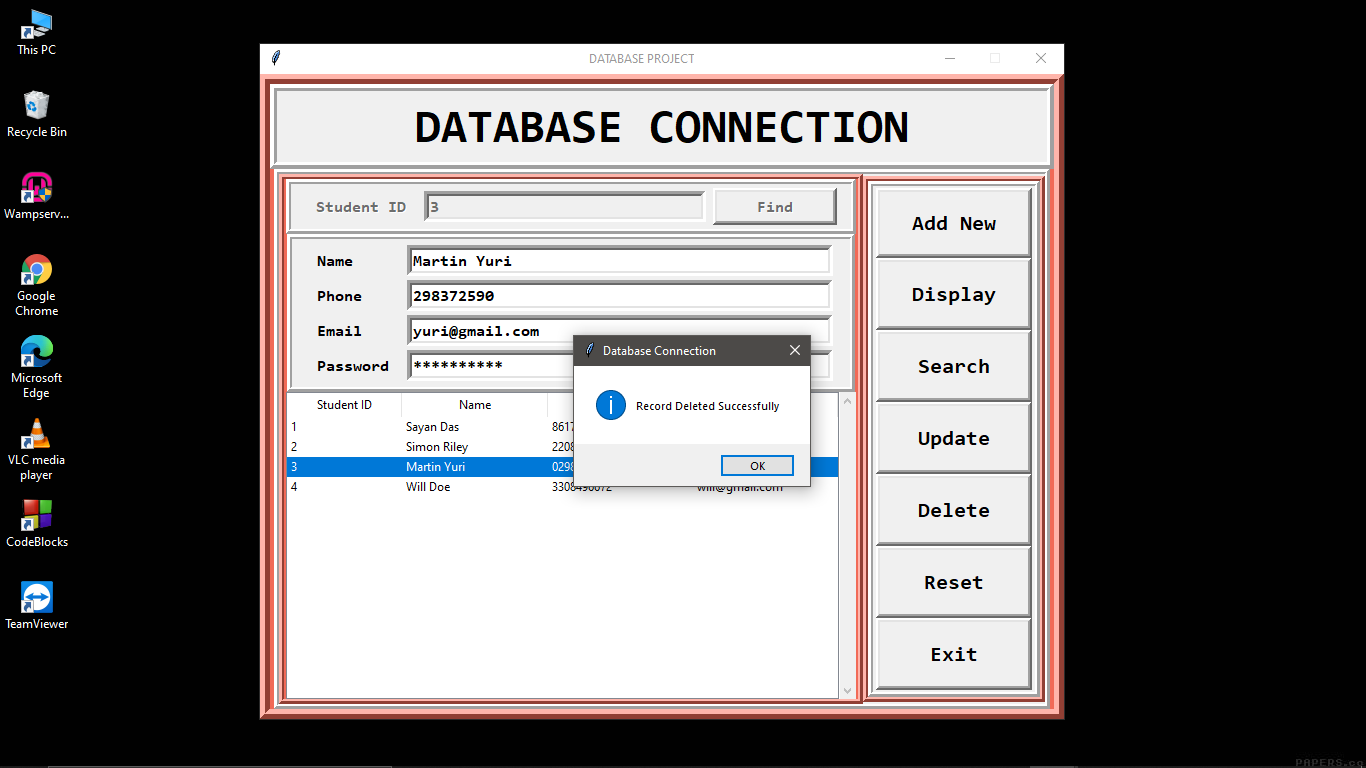
Initially, The **Student Id** frame was Disabled, But Whenever We Press the **Search** Button…this frame gets enabled. So that, We Will be able to find Students By There Ids.

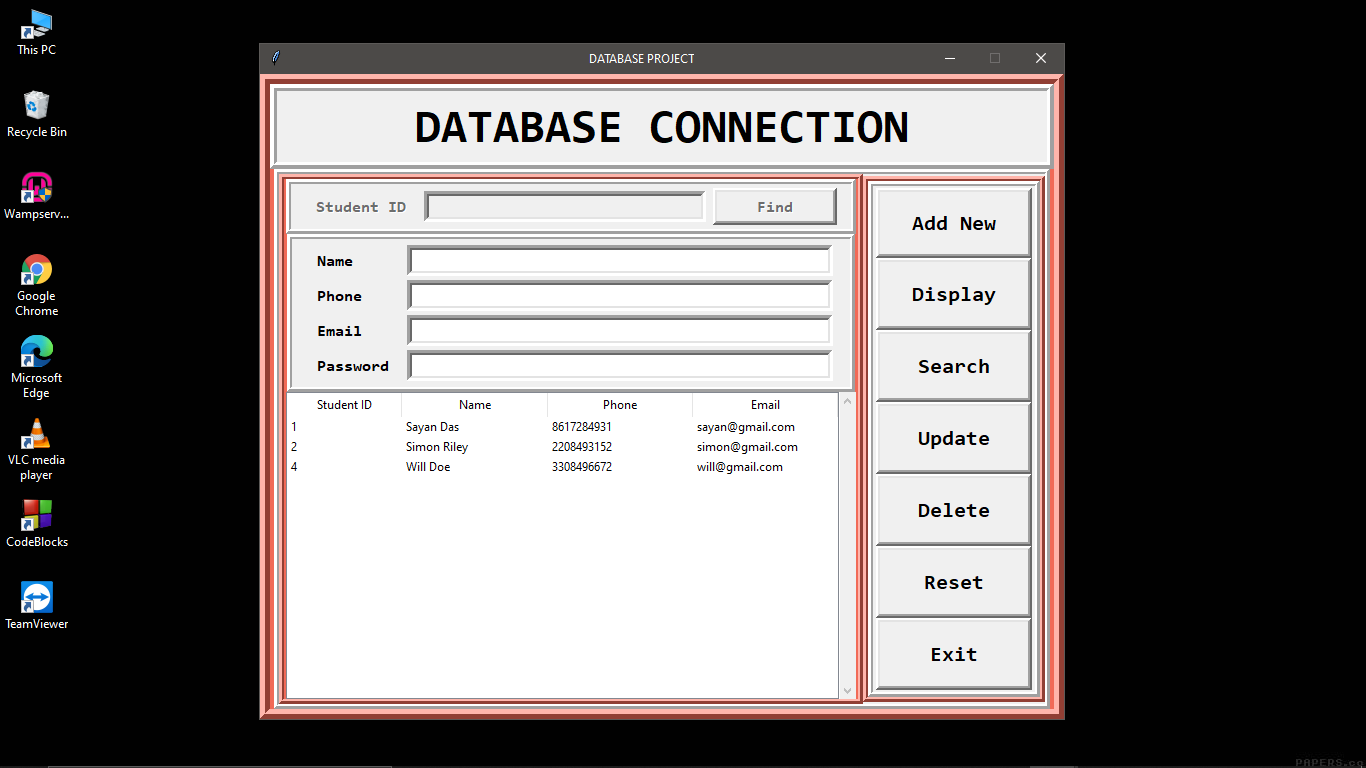


Then We will Press **Find** button to see The Student’s Details.



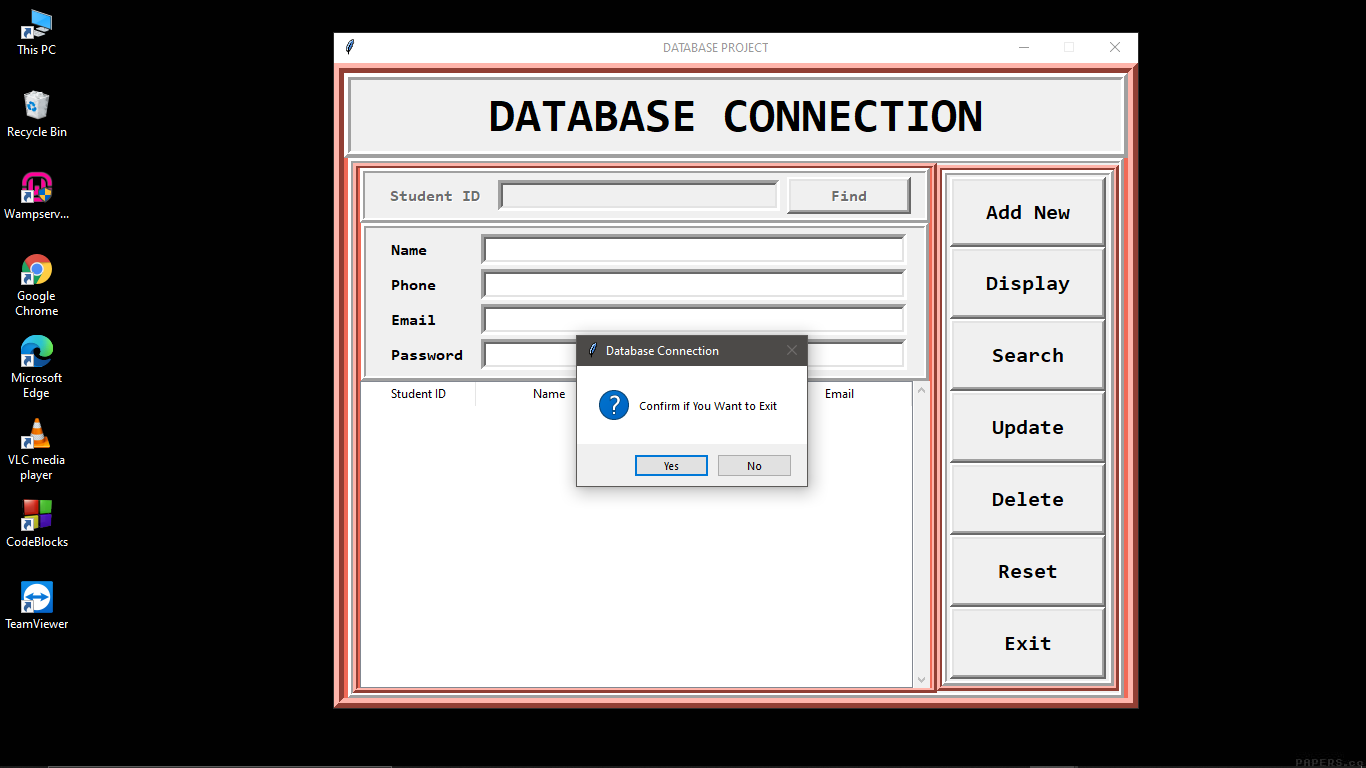
A User Can Update His or Her details by the **Update** button which will also get changed in the database.





**Delete** buttondeleting a Record from Database.

**Reset** button resets the Entries.



**Exit** button use to exit the current Window.

# CONCLUSION

**Python is a high level and multi-paradigm programming language designed by Guido van Rossum, a Dutch programmer**, having all the features as conventional programming languages such as C, C++ and Java have.

It is one of the fastest growing languages and has undergone a successful span of more than 25 years as far as its adoption is concerned. This success also reveals a promising future scope of python programming language.

In fact, it has been continuously serving as the best programming language for application development, web development, game development, system administration, scientific and numeric computing, GIS and Mapping etc.

Generally, we have seen that **python programming language is extensively used for web development, application development, system administration, developing games etc.**

As a matter of fact, Python has become the core language as far as the success of these technologies is concerned.

Thus, from this project database connection and python programming has made it easier for management system such as employee management system for any company.

# **ACKNOWLEDGEMENT**

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