

Welcome to this intermediate level guided project on establishing a database connectivity using python scripts. By the end of this project, we will be able to establish and verify a connection to a Maria DB server using python scripts. This project is for anyone who works with databases and is interested in automating the routine task of connecting to the database with less effort. To be successful in this project, knowledge of basic programming, construct and knowledge of basic UNIX shell scripting are recommended. My name is Swetha Maheshwary and I'm your instructor for this project. I work in IT industry as a Technology Lead, having 14 years of experience and also I'm certified as a Microsoft technology associate in python programming. Let's get started. Imagine you are a database administrator for ABC investment, a major financial firm just like any large company. This firm tracks data for their Employees, Department, Customers and all transactions. Unfortunately the firm acquires high labor and time costs associated to manual database management. To improve the business, ABC firm has decided to move towards automation. Your first task as a database administrator is to create a python script, which connects to the database server, which the company uses to store all its data. But the end of this task you will be learning how to install python interpreter. Let's get started, by installing the python interpreter. Before we start task one let us view the end result of the project, which appears as displayed on the screen "Connection Established Successfully !" to the Maria DB Server. You will be performing various steps to arrive at the result. by the end of final task. You can pause the video at any time in order to practice complex concepts or to catch up. Let's get started by installing the python interpreter. The interpreter which you install can understand and interpret the python source. code very quickly and efficiently into your own workspace. First, we will need to connect to the terminal. Let's right click on the desktop and select open a new terminal. Good, in the terminal. We will start by executing the command to update and refresh repository list. So, type `sudo apt update` press enter. The purpose of using `sudo apt update` command in Linux is If you prefix `sudo` with any Linux command, it will run that command with elevated privileges. Elevated privileges are required to perform certain administrative task. The `apt` command is a powerful command line tool which works with you. Ubuntu's Advanced Packaging Tool, performing installation of new software packages. The command has executed successfully, when you run `sudo apt-get upgrade` to install available upgrades of all packages currently installed on the system from the sources configured. Great!. So far you have accomplished the goal with the help of `sudo apt update` command which is used to download package information from all configured sources. Next, we will need to install the package software- `-properties-common` for better control over your package manager. By letting you at PPA (Personal Package Archive) repositories. To do so, let's give the command `sudo apt install software-properties-common -y` press enter. Great!. So far you have successfully installed software-`-properties -common`. Next, we will add Deadsnakes python packaging authority. Deadsnake is a PPA with newer releases, which allows you to install multiple python version on your ubuntu machine. This will help you to install latest python version in compassion with your python2 and python3. That comes with your distribution. To execute the command let us type `sudo add-apt-repository ppa:deadsnakes/ppa -y` press enter. Great! You have now successfully added the repository ppa Deadsnakes. at this point, you have successfully enabled the repository. This will allow you to install the python. code language into the terminal. So, let's get started on doing that. We will install the latest version of python, which is python 3.9 by typing the command. `sudo apt install python3.9 -y` press enter. Excellent! python should now be installed on your workspace in the next task. We will verify that our python packages have been installed correctly. See you there!