

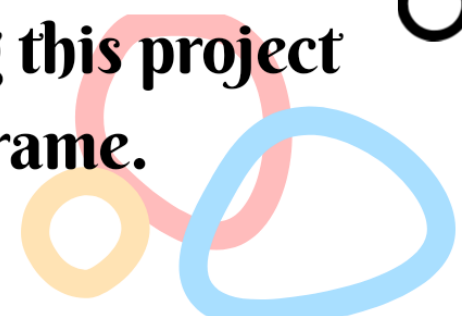


Acknowledgement

We would like to express our special thanks of gratitude to our teacher Mrs. Ruhi Seth as well as our principal Mrs. Anupama Mishra who gave us the golden opportunity to do this wonderful project on the topic of our own choice using Python and MySQL, which also helped us in doing a lot of Research and we came to know about so many new things, we are really thankful to them.

Secondly, I would like to thank to each other because obviously we both have only made this project with patience and coordination.

Finally we would like to thank to our parents who helped us a lot in finalizing this project within the limited time frame.





SUNBEAM SCHOOL VARUNA

Certificate

This is to certify that **Swarit Jain (Class 12-A)** and **Tanishq Singh (Class 12-C)** of class XII of Sunbeam School Varuna, Varanasi has completed this project under my supervision. They have taken interest and shown utmost sincerity in completion of this project. They have successfully completed the project work in ‘Computer Science (083)’ up to my satisfaction.

(P.G.T. Computer Science)

What is Python?

Python is a popular programming language. It was created by Guido van Rossum, and released in 1991.

It is used for:

- Web development (Server-side),
- Software development,
- Mathematics,
- System scripting

I) What can Python do?

- Python can be used on a server to create web applications.
- Python can be used alongside software to create workflows.
- Python can connect to database systems. It can also read and modify files.
- Python can be used to handle big data and perform complex mathematics.
- Python can be used for rapid prototyping, or for production-ready software development.

II) Why Python?

- Python works on different platforms (Windows, Mac, Linux, Raspberry Pi, etc).
- Python has a simple syntax similar to the English language.
- Python runs on an interpreter system, meaning that code can be executed as soon as it is written. This means that prototyping can be very quick.

- Python can be treated in a procedural way, an object-oriented way or a functional way.
- Python has syntax that allows developers to write programs with fewer lines than some other programming languages.

III) Good to know

- The most recent major version of Python is Python 3. However, Python 2, although not being updated with anything other than security updates, is still quite popular.
- Python comes with a pre-built text editor. It is also possible to write Python in an Integrated Development Environment, such as Thonny, Pycharm, NetBeans or Eclipse which are particularly useful when managing larger collections of Python files.

IV) Python Syntax compared to other programming languages

- Python was designed for readability, and has some similarities to the English language with influence from mathematics.
- Python uses new lines to complete a command, as opposed to other programming languages which often use semicolons or parentheses.
- Python relies on indentation, using whitespace, to define scope; such as the scope of loops, functions and classes. Other programming languages often use curly-brackets for this purpose.

What is MySQL ?

- MySQL is a database system used for developing web-based software applications.
- MySQL used for both small and large applications.
- MySQL is a relational database management system (*RDBMS*).
- MySQL is fast, reliable, and flexible and easy to use.
- MySQL supports standard SQL (*Structured Query Language*).
- MySQL is free to download and use.
- MySQL was developed by Michael Widenius and David Axmark in 1994.
- MySQL is presently developed, distributed, and supported by Oracle Corporation.
- MySQL Written in C, C++.

Main Features of MySQL

- MySQL server design is multi-layered with independent modules.
- MySQL is fully multithreaded by using kernel threads. It can handle multiple CPUs if they are available.
- MySQL provides transactional and non-transactional storage engines.
- MySQL has a high-speed thread-based memory allocation system.

- MySQL Handles large databases.
- MySQL Server works in client/server or embedded systems.
- MySQL Works on many different platforms.
- MySQL supports in memory heap table

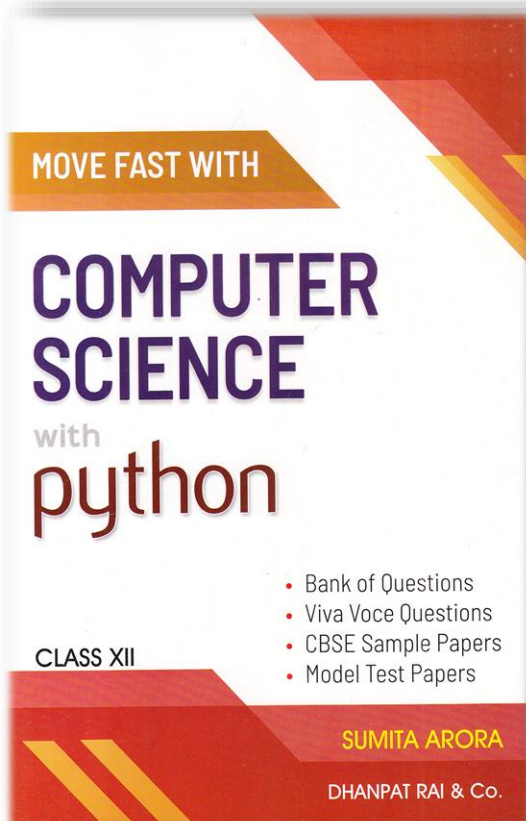
Who Uses MySQL

- Some of the most famous websites like Facebook, Wikipedia, Google (not for search), YouTube, Flickr.
- Content Management Systems (CMS) like WordPress, Drupal, Joomla, phpBB etc.
- A large number of web developers worldwide are using MySQL to develop web applications.

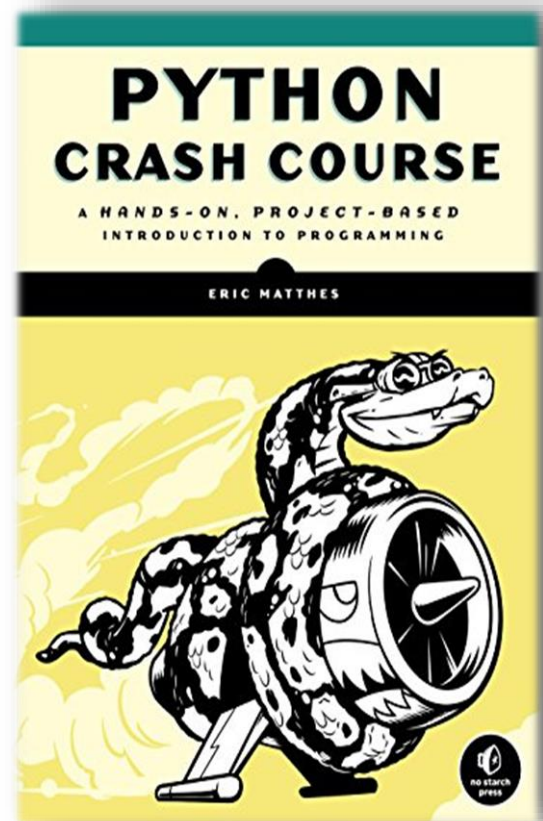
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**Computer Science with
Python – Sumita Arora**
Class 12



**Python Crash Course –
Eric Matthes**

acc_ctrl.py

books.py

orders.py

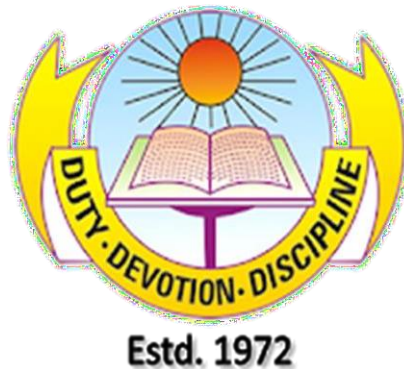
main_menu.py

Complete MySQL Data with Test Entries

config.py

SUNBEAM SCHOOL VARUNA

VARANASI



Computer Science (New) (083)

Project On

Python and MySQL

(Book Shop Management System)

Session 2020-21

under the guidance of: -

Ms. Ruhi Seth

Made by:-

Swarit Jain

(XII-A,)

Tanishq Singh

(XII-C,)

Acknowledgement

We would like to convey our thanks to ***Ms. Ruhi Seth***, our ***COMPUTER SCIENCE*** teacher, Sunbeam School, Varuna for her immense help and guidance in the completion of our project. It is only due to her effort that our project could be completed successfully. This report is submitted as a part of practical examination included in curriculum of CBSE for ***AISSE*** (All India Senior Secondary Examination) to be held in the year 2020-21.