

PYTHON AND MYSQL COURSE SYLLABUS FOR KIDS

- Day 1: Introduction to Python
- What is Python? Why is it important?
- Setting up the Python environment
- Getting Started with Python
- Introduction to basic syntax: variables, data types, and print statements
- Basic arithmetic operations in Python
- ❖ Day 2: Python Control Structures
- Introduction to if statements and conditional execution
- Using if-else statements for decision-making
- Hands-on practice with conditional statements and decision-making in Python
- ❖ Day 3: Loops and Iterations
- Understanding loops: for loops and while loops
- Using loops for repetitive tasks
- Hands-on practice with loops and iterations in Python
- ❖ Day 4: Lists and Tuples
- ➤ Introduction to lists and tuples in Python





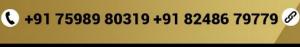
- Understanding list operations: append, remove, index
- ► Hands-on practice with lists and tuples manipulation
- ❖ Day 5: Dictionaries and Sets
- Understanding dictionaries and sets in Python
- > Exploring dictionary and set operations
- ► Hands-on practice with dictionaries and sets manipulation
- ❖ Day 6: Functions in Python
- What are functions and why are they useful?
- Defining and calling functions in Python
- ► Hands-on practice with function creation and usage
- ❖ Day 7: Introduction to File Handling
- Reading from and writing to files in Python
- Understanding file modes: read, write, append
- ► Hands-on practice with file handling operations
- ❖ Day 8: Introduction to MySQL
- Understanding what MySQL is and its role in database management

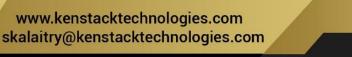




- Learning basic MySQL syntax for creating databases and tables
- > Setting up a MySQL database and creating sample tables
- Day 9: Connecting Python to MySQL
- Learning how to establish a connection between Python and MySQL
- Understanding basic SQL queries for data retrieval and manipulation
- Hands-on practice executing MySQL queries from Python scripts
- Day 10: Working with Data in MySQL Database
- Learning how to insert, update, and delete data in a MySQL database using Python
- Understanding basic SQL queries for data manipulation
- ► Hands-on practice working with data in a MySQL database using Python
- Day 11: Retrieving Data from MySQL Database
- Learning how to retrieve data from a MySQL database using Python
- Understanding basic SELECT queries for data retrieval
- Hands-on practice retrieving and displaying data from a MySQL database using Python
- ❖ Day 12: Introduction to Data Analysis with Python

Understanding the basics of data analysis with Python









- ➤ Introduction to libraries such as Pandas for data manipulation
- Hands-on practice with basic data analysis tasks using Python
- ❖ Day 13: Application Projects
- Students work on individual or group projects applying Python and MySQL skills learned so far
- Projects may include building a simple inventory management system, creating a student information database, or developing a basic blogging platform
- Guidance and feedback provided by instructors as students work through their projects
- ❖ Day 14: Project Presentations and Feedback
- > Students present their completed projects to peers or parents
- Feedback session: peers provide constructive feedback on each other's projects
- Reflection: students reflect on their learning experience and the application of Python and MySQL skills in their projects
- ❖ Day 15: Review and Recap
- Reviewing key concepts covered throughout the course
- Recapping important Python and MySQL features and techniques
- Providing additional practice opportunities and challenges for students to reinforce their learning



