

Python Workshop

Content

Day 1

Session 1

- Introduction to python
- Discuss How Python Program runs
- Getting started with Python IDLE (Hands on)
- Types and Operations in python(Hands on)
- Numbers, Strings(Hands on)
- Lists, Tuples & Dictionaries(Hands on)
- File Handling in Python (Hands on)
- Statements and Syntax(Hands on)
- Assignments, Expressions and Print Statements

Session 2

- Conditional constructs(Hands on)
- Iterative Constructs(Hands on)
- Introduction to Functions and Lambda Forms
- Functions and Arguments and Scope
- List Comprehensions(Hands on)
- Appending data in lists (Hands on)
- Generators(Hands on)
- Understanding Modules in Python
- Module Packages
- Package Imports Mixed usage modes

Day 2

Session 1

- Getting started with PyQt(Hands on)
- Installing PyQt(Hands on)
- Designing UI using PyQt(Hands on)
- Creating windows, buttons, textfields(Hands on)
- Introduction to OO Programming in python
- Class coding basics
- OOP and Inheritance(Hands on)
- New Styled Classes(Hands on)
- Introduction to Exceptions
- Assigning action to elements (Hands on)
- Designing a complete functioning app (Hands on)

Session 2

- Designing a calculator using PyQt& Python (Hands on)
- Development using Qt Framework (Hands on)
- Configuring Sqlite Database (Hands on)
- SqliteQueries and handling database entries (Hands on)
- Designing database based applications (Hands on)
- Converting .qt format to .py(Hands on)
- Converting python code to executable format (Hands on)
- Deploying Apps (Hands on)
 - 4 Projects will be covered.
 - Query Session.

Competition

After the hand on theory and practical experience from the workshop, a competition will be conducted for the participants.

Certificate Distribution

On behalf of Techtron Technologies Certificate of Merit will be provided to all Zonal Round Winners and Certificate of Participation will be provided to all the Zonal Round Participants (Excluding Merit Participants).