

Introduction

Why do we need Python?

Program structure

Execution steps

Interactive Shell

Executable or script files.

User Interface or IDE

Memory management and Garbage collections

Object creation and deletion

Object properties

Data Types and Operations

Numbers

Strings

List

Tuple

Dictionary

Other Core Types

Statements and Syntax

Assignments, Expressions and prints

If tests and Syntax Rules

While and For Loops

Iterations and Comprehensions

File Operations

Opening a file

Using Files

Other File tools

Functions

Function definition and call

Function Scope

Arguments

Function Objects

Anonymous Functions

Modules and Packages

Module Creations and Usage

Module Search Path

Module vs. Script

Package Creation and Importing

Classes

Classes and instances

Classes method calls

Inheritance and Compositions

Static and Class Methods

Bound and Unbound Methods

Operator Overloading

Polymorphism

Exception Handling

Default Exception Handler

Catching Exceptions

Raise an exception

User defined exception

Advanced Concepts

Decorators

Generators

Iterators

Co-routines

TeK Classes