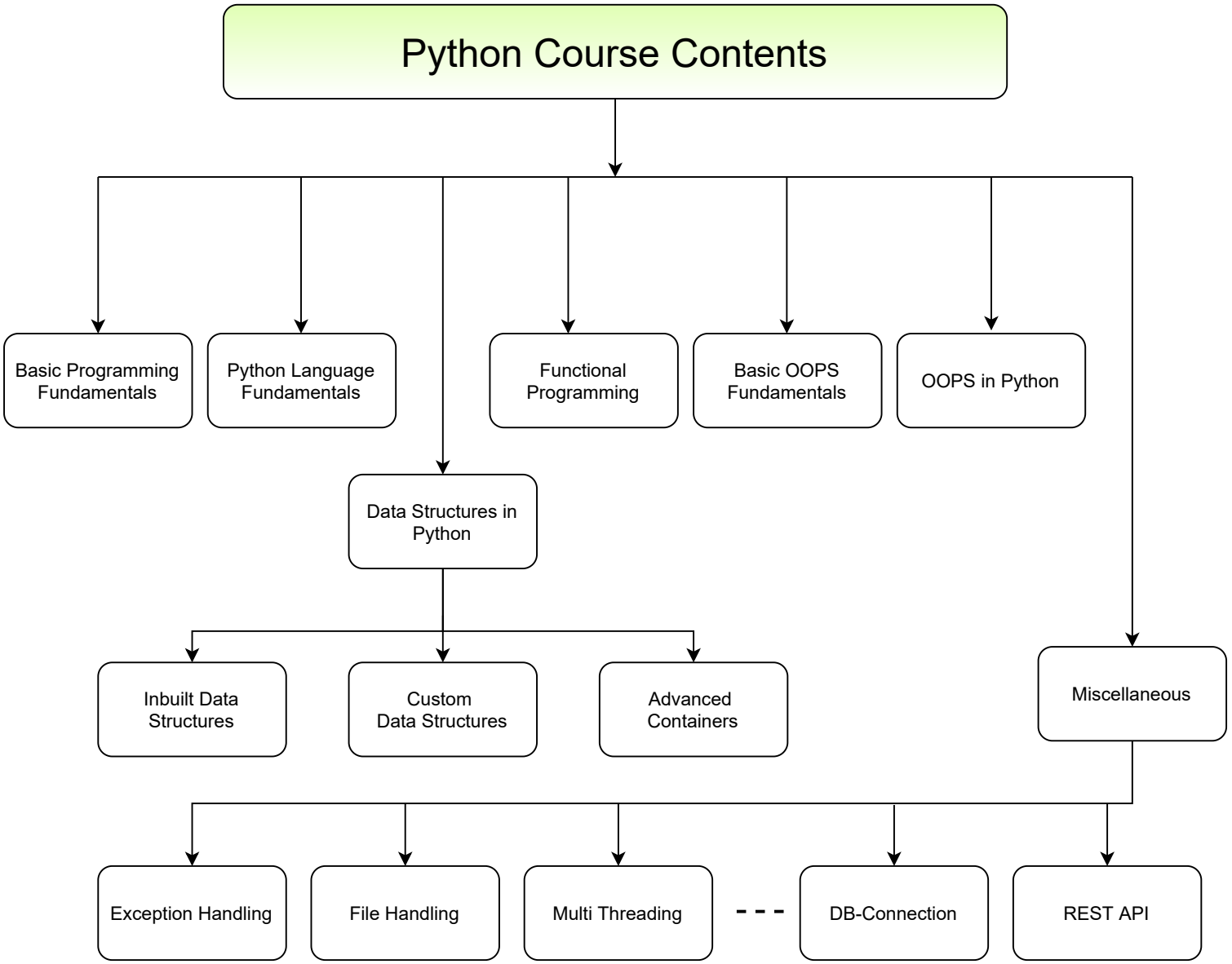
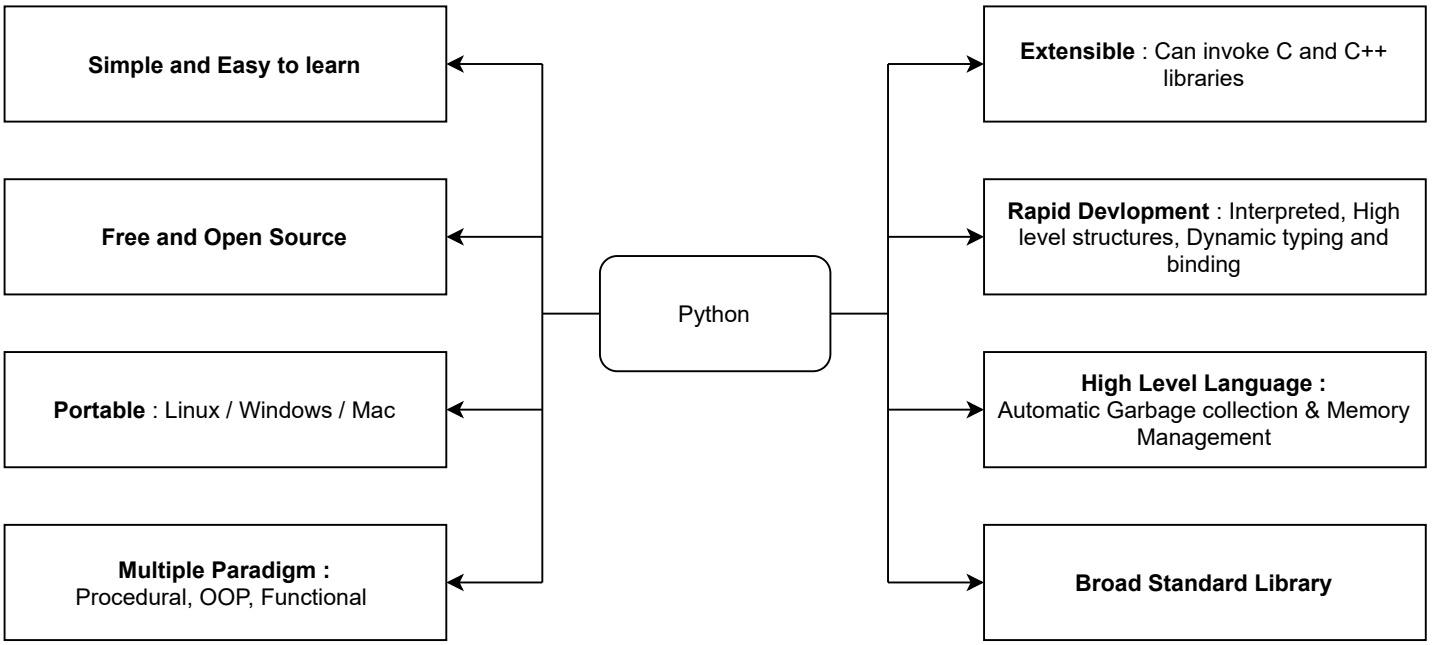
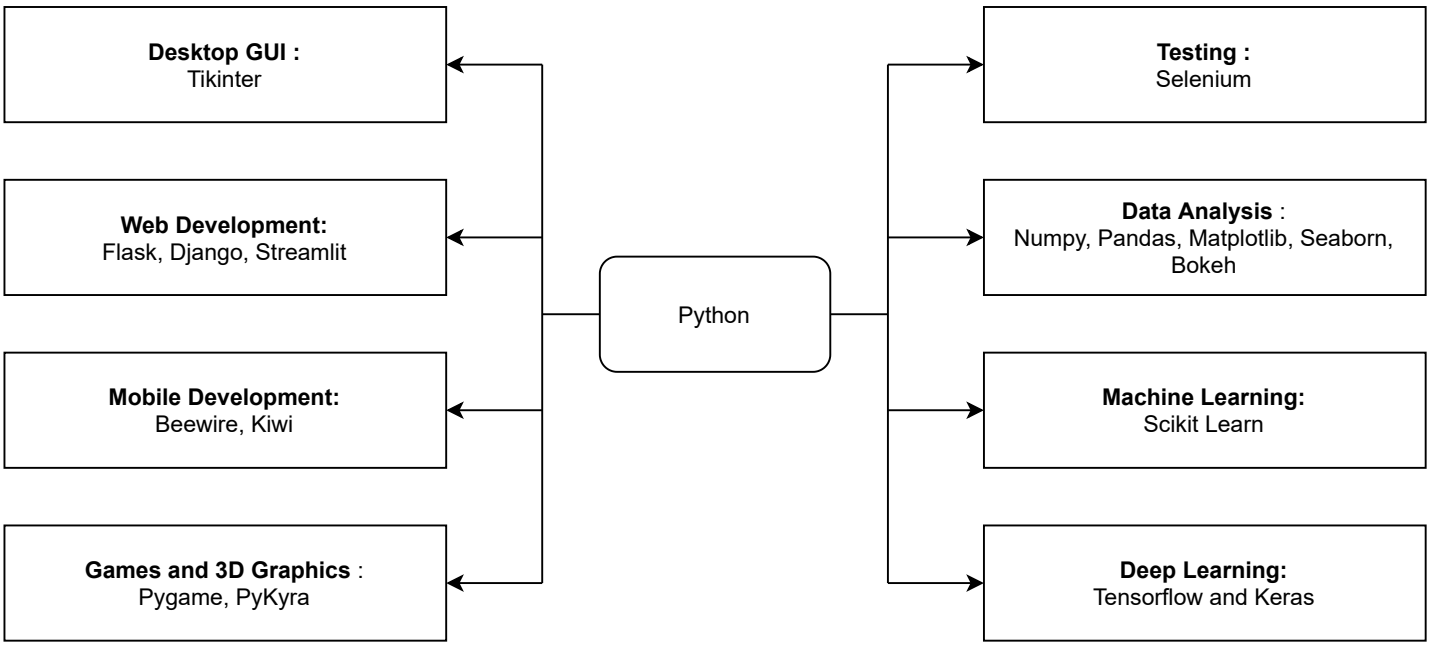
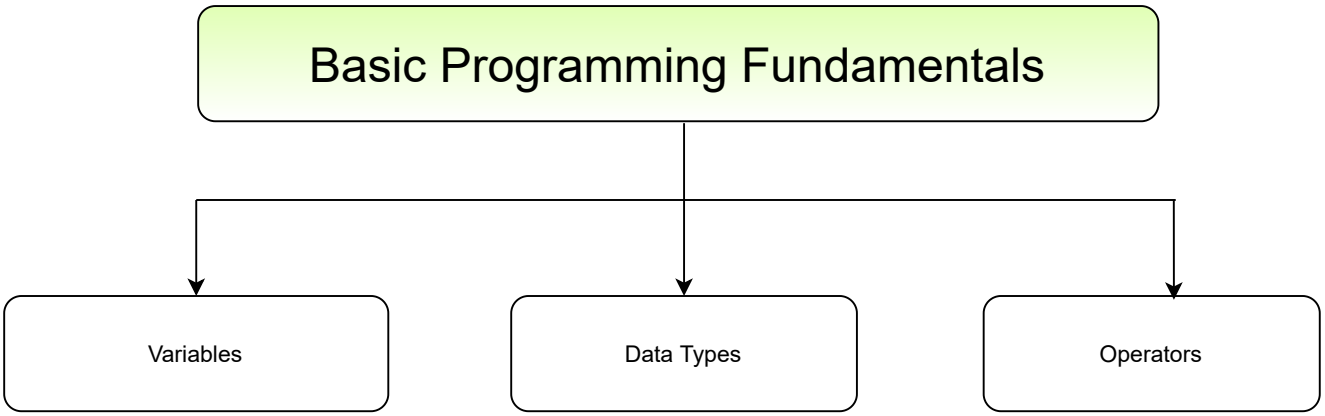

Python Course Contents
Basic Programming Fundamentals
Python Language Fundamentals
Functional Programming
Basic OOPS Fundamentals
OOPS in Python
Data Structures in Python
Inbuilt Data Structures
Custom Data Structures
Advanced Containers
Miscellaneous
Exception Handling
File Handling
Multi Threading
DB-Connection
REST API

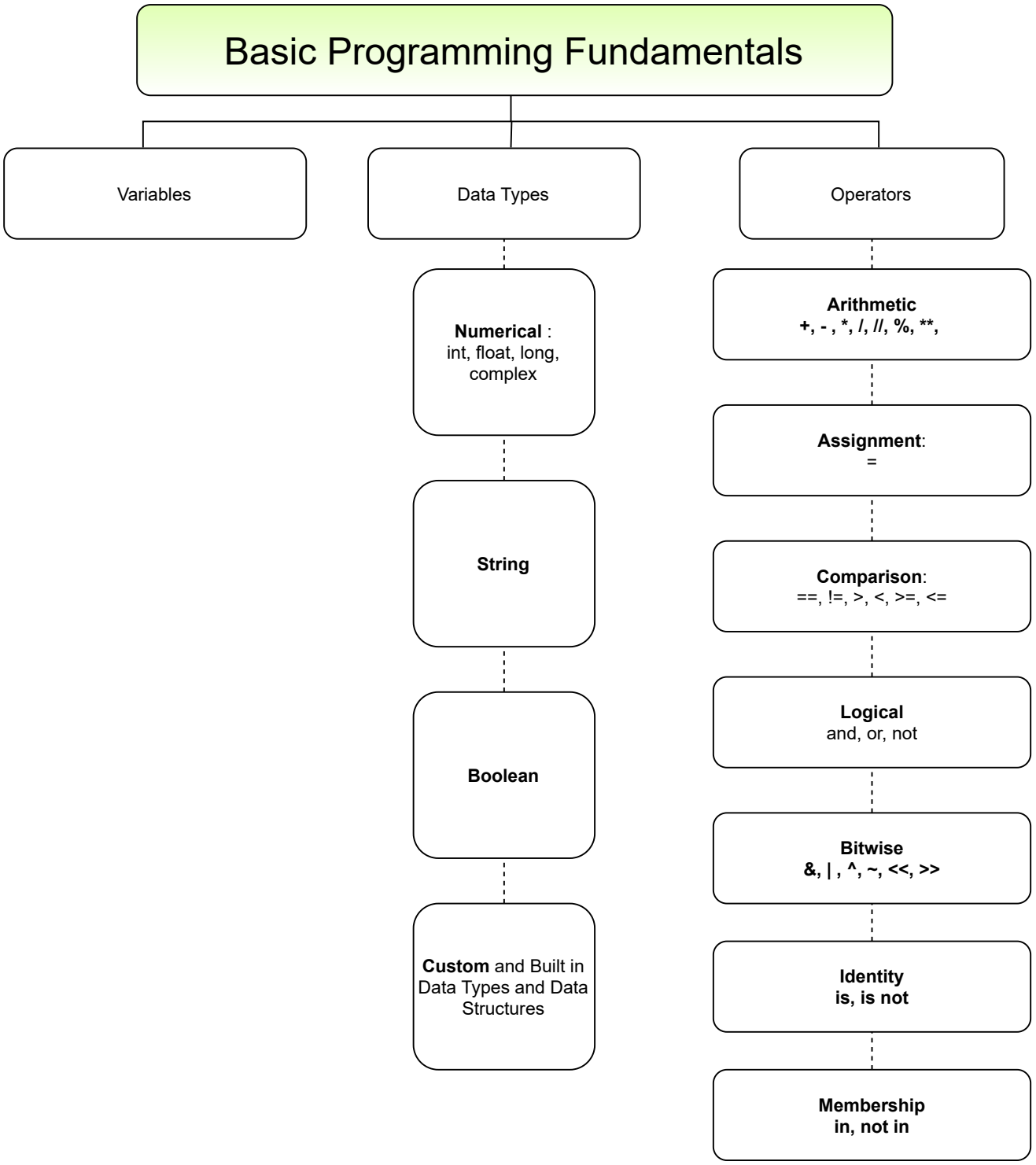
Python Features

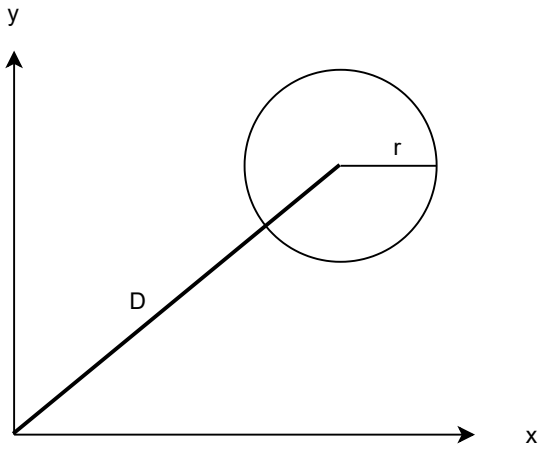


Python Applications



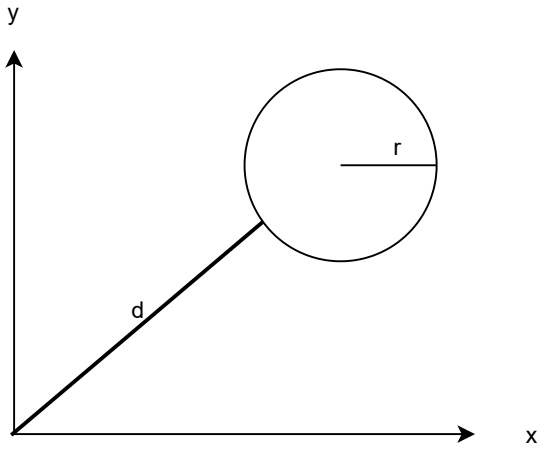

Basic Programming Fundamentals
Variables
Data Types
Operators


Basic Programming Fundamentals
Variables
Data Types
Operators
Numerical : int, float, long, complex
String
Boolean
Custom and Built in Data Types and Data Structures
Arithmetic +, - , *, /, //, %, **,
Assignment: =
Comparison: ==, !=, >, <, >=, <=
Logical and, or, not
Bitwise &, | , ^, ~, <<, >>
Identity is, is not
Membership in, not in

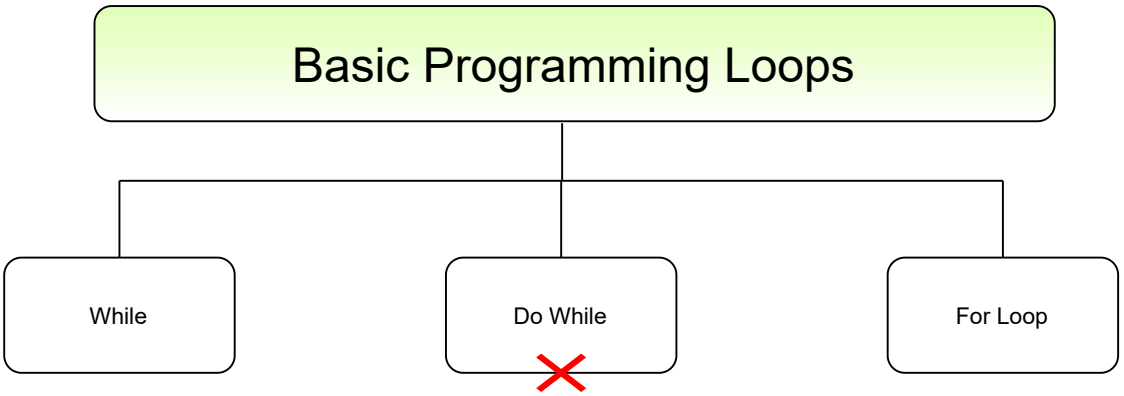


Calculate

Area
Perimeter
D
d

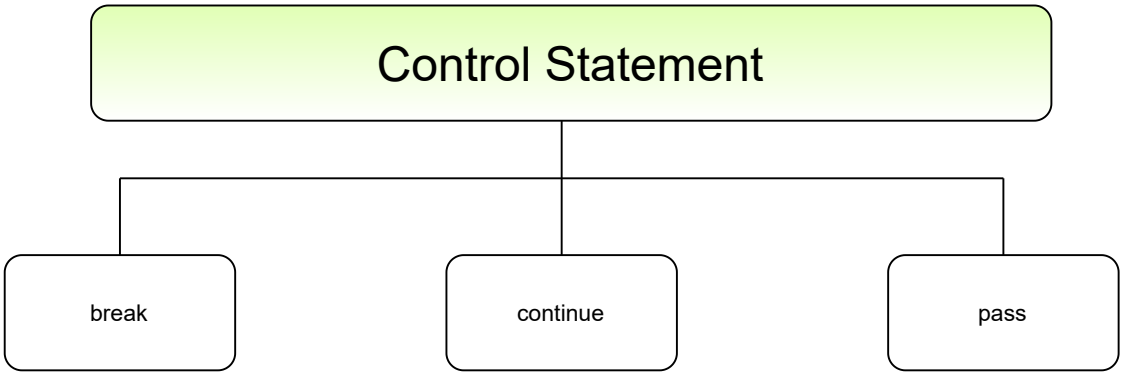


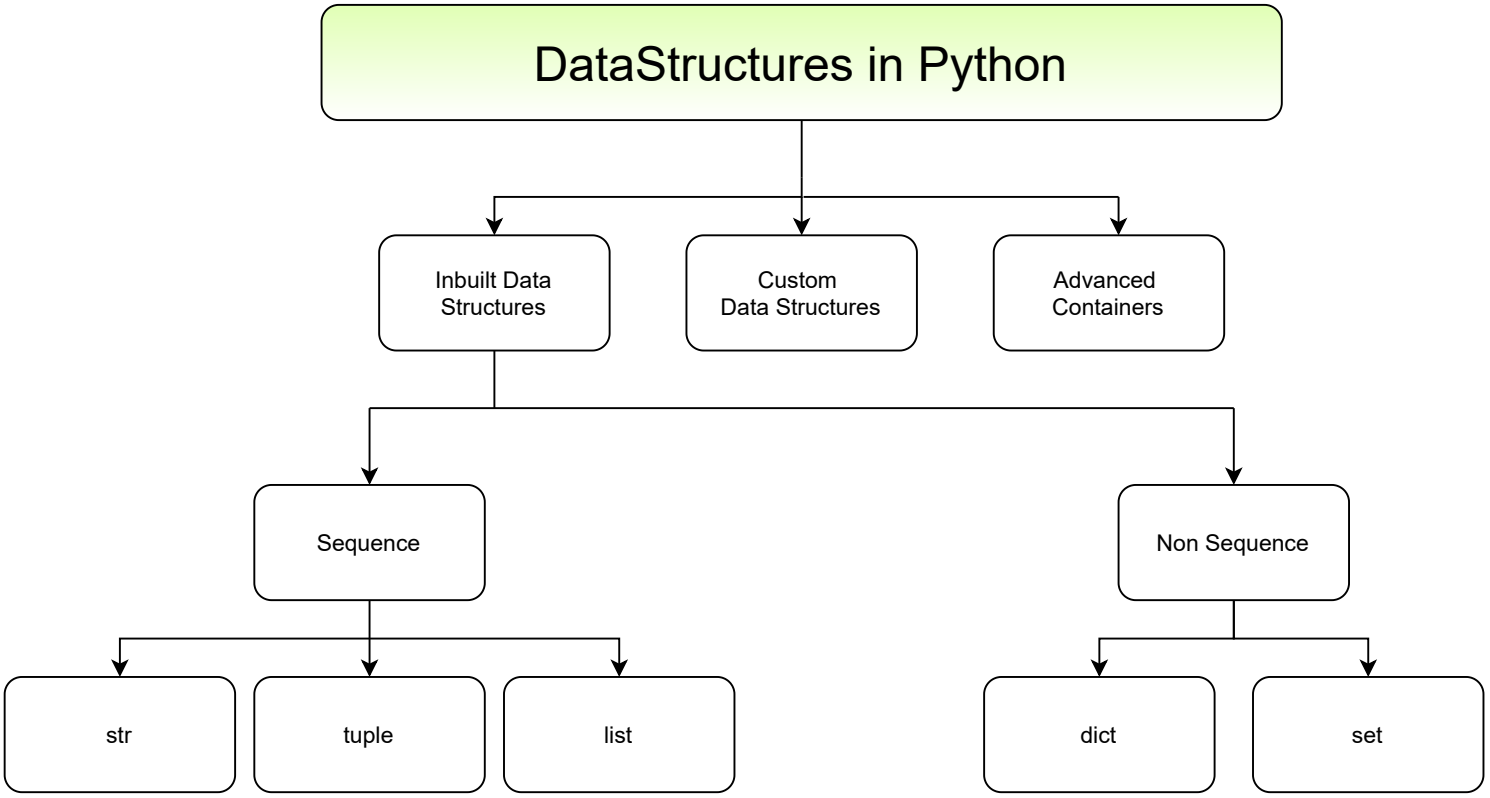
Control Flow



Uses :

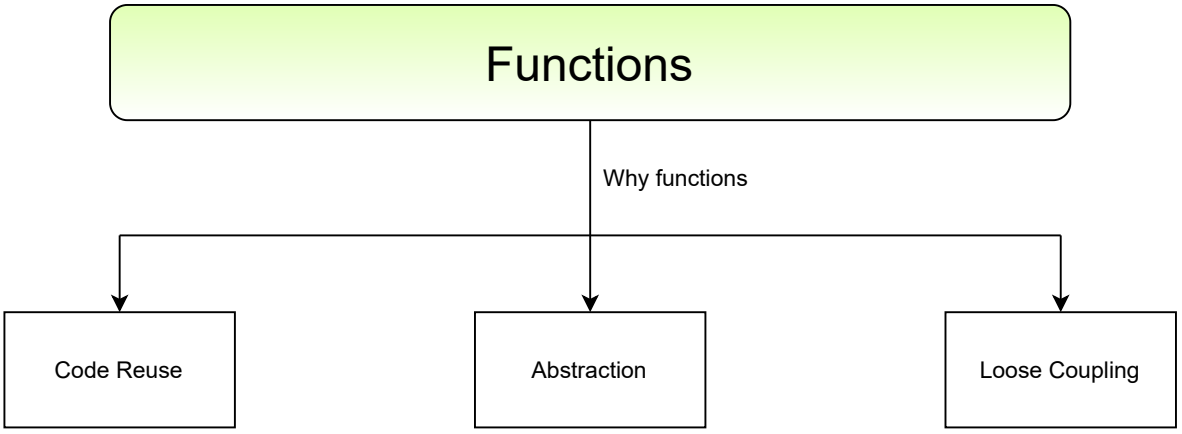
- Do while is not available in Python but can be implemented using a simple trick
- Use while loop when you dont know the excat number of iterations to do
- Use for loop when you know the exact number of iterations to do


Control Statement
break
continue
pass

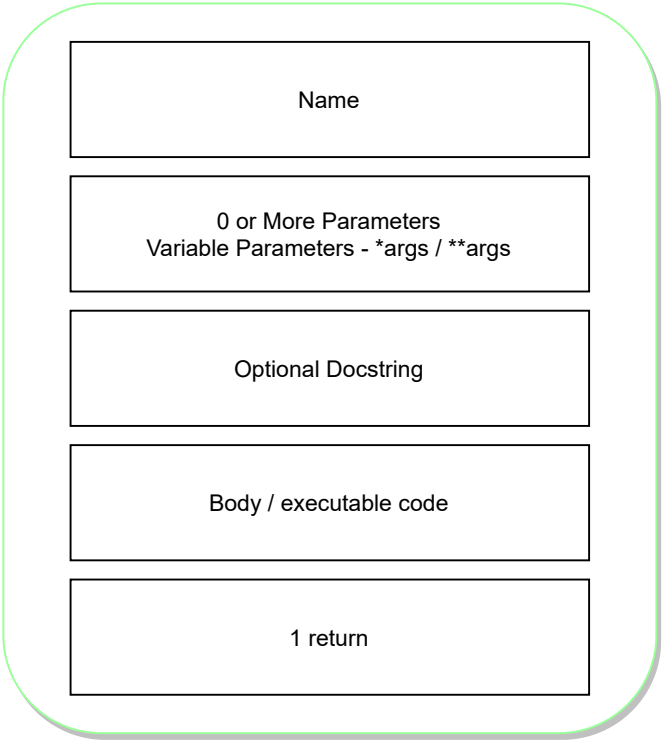

DataStructures in Python
Inbuilt Data Structures
Custom Data Structures
Advanced Containers
Sequence
Non Sequence
str
tuple
list
dict
set

Importance of Data Structures

Comprehension


Functions
Why functions
Code Reuse
Abstraction
Loose Coupling

Function Structure



Notes

Functions are not run in the program until they are called or invoked

Formal vs Actual parameter

Print vs Return

Global Scope vs Function Scope

None is returned if there are no return in function

Parameter for a function can be another function

Importance of dict & set for search