



PYTHON FOR STARTERS – WHAT YOU WILL LEARN

COMPUTATIONAL THINKING AND GETTING STARTED WITH PYTHON

- COMPUTATIONAL THINKING
- PYTHON - ADVANTAGES
- PYTHON - DISADVANTAGES
- WORKING IN PYTHON
- UNDERSTANDING FIRST PROGRAM/SCRIPT

PYTHON FUNDAMENTALS

- PYTHON CHARACTER SET
- TOKENS
- BARE BONES OF A PYTHON PROGRAM
- VARIABLES AND ASSIGNMENTS
- SIMPLE INPUT AND OUTPUT

DATA HANDLING

- PRIMITIVE DATA TYPE
- PYTHON DATASTRUCTURE
- CONCEPT OF MUTABLE AND IMMUTABLE OBJECTS
- OPERATORS
- EXPRESSIONS
- WORKING WITH SOME STANDARD MODULUS

CONDITIONAL AND ITERATIVE STATEMENTS

- STATEMENT FLOW CONTROL
- DESIGNING PROGRAM AND DEVELOPMENT TOOLS
- THE IF STATEMENTS OF PYTHON
- REPETITION OF TASKS - A NECESSITY
- THE RANGE() FUNCTION
- ITERATION/LOOPING STATEMENT

STRING MANIPULATION

- TRAVERSING A STRING
- STRING OPERATORS
- STRING SLICING
- STRING FUNCTIONS AND METHODS

FUNCTIONS IN PYTHON

- CREATING FUNCTIONS
- CALLING A FUNCTION
- RECURSIVE FUNCTION
- ITERATIVE V/S RECURSIVE FUNCTION

DEBUGGING PROGRAMS

- ERRORS AND EXCEPTIONS
- HOW DO DEBUG A PROGRAM

LIST MANIPULATION

- CREATING AN ACCESSING LIST
- LIST OPERATIONS
- WORKING WITH LISTS
- LISTS FUNCTIONS AND METHODS

TUPLES

- CREATING AND ACCESSING TUPLES
- TUPLE OPERATIONS
- TUPLE FUNCTIONS AND METHODS

DICTIONARIES

- DICTIONARY. KEY- VALUE PAIRS
- WORKING WITH DICTIONARIES
- DICTIONARY FUNCTIONS AND METHODS

FILE HANDLING

- CREATING A FILE
- OPENING AND CLOSING A FILE
- READING AND WRITING INTO A FILE
- UPDATING A FILE

INTRODUCTION TO OOPS

