PRIMEBIT SOLUTIONS

- START YOUR SUCCESS

Python Programming Course Curriculum

MODULE 1: BASICS OF PYTHON

• Introduction

PYTHON OPERATORS

- Arithmetic
- Relational
- Logical
- Assignment
- Bitwise
- Membership
- Identity operators.

PYTHON CONDITIONAL STATEMENTS

- If
- If else
- If elif

PYTHON LOOPS

- While
- For
- Range()
- Break and Continue
- Example problems

PYTHON NUMBERS

- Types in numbers
- Type convertions

PYTHON STRINGS

- Built-in functions.
- Basic operators
- Slicing
- Example problems

PYTHON LISTS

- Array or list in python
- List slicing techniques
- Built-in functions

PYTHON TUPLE

- Tuple & Immutability
- Built-in functions
- Example problems

PYTHON DICTIONARIES

- Creation of dictionaries
- Built-in functions
- Example problems

PYTHON FUNCTIONS

- Advantages of functions
- Function definition using
- def statement.
- calling function
- passing parameters
- scope of the variables

MODULES IN PYTHON

- Importing modules
- creation of own modules
- standard modules os / sys

EXCEPTION HANDLING

- Handling exceptions
- Try-except block
- Example problems

FILE HANDLINGS

- Files and directories
- Text files
- Binary files
- Text file processing
- Binary file processing

MODULE 2 : ADVANCED PYTHON

NETWORK PROGRAMMING

- In this, we will teach how we will send as well as receive data between devices by using TCP/IP and UDP protocols.
- Python supports many networking protocols through libraries such as a socket, SMTP etc and you can also write network programs directly by using TCP/IP or UDP sockets.

TCP VS UDP / CLIENT VS SERVER - PYTHON EXAMPLES:

• Python socket module makes it easy for you to write our own clients and server programs.

MULTIPROCESSING IN PYTHON:

Multiprocessing refers the ability of a system to support more than one processor at the same time. Applications in multiprocessing system are broken to a smaller routines that run independently. The operation system allocates this threads to the processors improving performance of the system.

FILE TRANSFER PROTOCOLS:

In this, we will teach how can we transfer the files as well as receive the files between the devices.

EMAILING:

To transfer the emails, we will use SMTP library which is a built-in library in python. SMTP (Simple Mail Transfer Protocol) is a protocol which enables you to send emails.