SLOG SOLUTIONS PRIVATE LIMITED
TECHNOLOGY: C PROGRAMMING
DURATION: MODULE 1 (4 WEEKS)

MODULE 1:

C Programming Essentials

BASICS OF C

- History and Features of C
- Importance of C
- About Procedural Language
- Role of Compiler
- Role of Interpreter
- The Structure of a C Program
- Writing C Programs
- Building an Executable Version of a C Program
- Debugging a C Program
- Examining and Running a C Application Program

An Overview of C and Buzzwords

- Data Type, Variable
- Operators
- Control Statement
- Preprocessor Directives Input and Output Operators
- Reading/Writing Characters
- Formatted input/output Function

Control Statement

- The if-else Statement
- If-else ladder
- Nesting of if-else Statements.
- The Switching Statements
- The do-while Statement
- The while statement
- FOR Statements

Array in C

- Array: What and Why?
- One Dimensions Arrays
- Two Dimensions Arrays
- Multi Dimensions Arrays
- Dynamic Arrays

String Handling

- Reading String from Terminal
- Writing String to Screen
- String Handling Functions
- Table of String

Function in C

- Function Basics
- Advantage of Function
- Recursion
- Variable Storage Classes
- Variable arguments Function

Pointers in C

- Understanding Pointers
- Pointer expressions
- Pointer and Arrays
- Pointers and Character String

Structures and Unions

- Defining a Structure
- Advantage of Structure
- Size of Structure
- Arrays of Structures
- Structures and Functions
- Defining Unions

Dynamic Memory allocation

- Introduction to Dynamic Memory Allocation
- Malloc
- Calloc
- Realloc
- Free

File Management in C

- Introduction to File Management
- Opening/Closing a File
- Input/output operations on Files
- Error Handling During I/O Operations
- Command Line Arguments