MindTec

"C" LANGUAGE

> ## INTRODUCTION TO C LANGUAGE, VARIABLES, DATA TYPES AND OPERATORS:

Introduction
History of C language
Basic Structure of C
Algorithms
Flow charts
Executing the C Program
Pre-processors in "C"
C Tokens

Variables:
Rules for defining variables
Scope and Life of a Variable
Data types
Type Conversion
Formatted Input and Output operations.

Operators:
Definition of Operator,
Operands-Arithmetic
Relational
Logical
Assignment
Conditional
Special
Bitwise
Increment / Decrement operator

> ## WORKING WITH CONTROL STATEMENTS, LOOPS

Conditional statements:

Introduction
If statements
If-else statements
nested if-else
Switch statements
break statement
continue statement
go to statement
return Statement.

Looping statements:

Introduction while statements
Do-While statements
For Statements (BTL-4)

➤ FUNCTIONS, ARRAYS AND STRINGS

Functions:

Definition and Declaration of Functions-
Function proto type
types of functions.

Built in functions:

Mathematical functions
String functions
Character functions
Date functions.

User defined functions:

Introduction
call by value
call by reference
Recursive functions.

Arrays:

Introduction of Arrays
One dimensional array
Two dimensional arrays
Multi dimensional array

String:

Declaring and initializing string
String Handling Functions

➤ POINTERS, STRUCTURES AND UNIONS

Pointers:

Definition of Pointer
Declaration of Pointers
Features of Pointers

Structures:

Definition of Structures
Declaring and initialization of Structures
Accessing Structures Members Array of Structures
Enumerated data type

Unions:

Definition and Declaring and initialization of Union
Comparison between Structure & Unions

➤ OBJECT ORIENTED CONCEPTS USING C++

Object Oriented Programming:

Introduction to Object Oriented Programming
Structure of C++
Simple program
 C++– Storage Classes
 Differences between C & C++
Object Oriented Concepts-Class
Object Inheritance
Polymorphism
Encapsulation
Abstraction

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