

C Programming Language

Duration: 45 Classes

FUNDAMENTALS:-Introduction to 'C' ,History, Structure of C Program , Compiler Linker ,Loader, Character Set, Identifiers, Keywords, Data Types ,Variables ,Declaration of variables, Initialization of variables, Assignments of variable,Constants, Input-Output Operation ,format specifiers ,Operators, , Expressions.

1. **CONTROL STATEMENTS**: -Selections/ Conditional (if, if-else, else-if ladder, Nested if-else, Switch statements), Iteration/ Loop(Do-While, While, For, Nested loop Statements), Jumping Statements (break, continue, goto, return, exit ()).
2. **ARRAYS**: - Introduction to arrays, Need for Arrays, Types of arrays, Declaration, Initialization, Accessing, Reading and displaying elements of arrays, Assigned elements to arrays.
3. **STRING**: -Introduction to String, Need for String, Types of String,Declaring String, Initializing String, String Formatted Specifiers, String Functions.
4. **FUNCTION**: -Interdiction to Functions, Need for Functions, Classification of Functions, Function Prototype,Defining Function, CallingFunction, Function with Arrays, Function with Strings, Recursive Functions.
5. **STORAGE CLASSES**: - Automatic, Extern, Static, Register.
6. **STRUCTURE, UNION, ENUMERATIONS, TYPEDEF**:- Introduction to structures ,Declaring a Structure , Accessing structure members, Assigning values to structure members, Initialization of Structure, Arrays of Structures , Arrays within Structures, Nested Structures, Assignment of Structures variables, Structures and Function,Introduction to Union, Declaring Union, Difference between Structures and Unions, Enumerations, Typedef.
7. **POINTERS**:-Introduction to Pointer ,Declaration and Initialization of pointer, Void pointers , NULL pointer ,Operations on Pointer, Pointer to Pointer ,Pointer & Array, Pointer & String, Pointer & Functions, Pointers &Structures.
8. **DYNAMIC MEMORY ALLOCATION**: - introduction to Malloc, CallocRealloc& Free functions. Dynamic Arrays, Stings and Structures.
9. **FILE**:- Introduction to file, File Input-Output Operations,File Opening Modes, Sequential Access Files, Random Access Files, Command Line Arguments, Pre-processors, and user define header files.

