

C C++ DS JAVA TRAINING INSTITUTES IN KPHB HYDERABAD KPHB

Data types

- Data types
- Type Conversions
- Declaration and definition

Operators

- Arithmetic Operators
- Relational and Logical Operators
- Bitwise Operators
- Precedence and Order of Evaluation

Control Flow

- If
- Switch
- loops: for, while and do-while
- break and continue

Scope and storage

- automatic
- Register
- static
- extern

Preprocessor

- macros
- File inclusion
- macro substitution
- conditional inclusion
- if.....

Functions

- Introduction to Functions
- Defining & Calling Functions
- Pass by Value, pass by Reference
- Return by value & return by address
- Recursive Functions

Scope and storage

- automatic
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Functions

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Pointers

- Memory layout
- dynamic memory allocation
- Malloc , calloc ,realloc and free
- Pointers to variable
- pointer arithmetic
- Pointers to pointers
- pointer and arrays
- pointer and char strings
- pointer arrays
- pointers and multi dimensional arrays
- command line arguments
- pointers to functions
- Complicated declarations

Arrays

- Introduction to Arrays
- Need for Arrays
- Arrays with pointers
- Arrays with functions
- Types of Arrays
- One Dimensional Arrays
- Two Dimensional Arrays
- Multi Dimensional Arrays

Strings

- Char pointers
- Char array (String)
- Declaring & Initializing String Variables
- Strings with pointers
- Strings with functions
- String Functions
- Creation of our own string.h
- Array of Strings

Structures, Unions, Enum and typedef

- Enum and typedef
- Introduction to Structures
- Defining Structures
- Struct with pointers , arrays, strings and functions
- Array ,strings as Structures Members
- Containership
- Union, Different between Structure & Union

Data Structures

- Introduction to
- Sorting
- Bubble Sort
- Insertion Sort
- Selection sort
- Merge Sort
- Quick Sort
- Heap Sort

- Recursion
- Linked Lists
- Single linked lists
- Double linked lists
- Circular linked lists
- Stacks
- Queues
- Trees
- Graphs
- Tries
- Suffix trees
- Suffix arrays
- AVL trees
- Splay trees

Algorithm Class

Email: algorithm.class@gmail.com

Website: <https://sites.google.com/site/algorithmclass>