

SDF-2

Topics after T1

- Revision of Linked Lists
- Binary Tree- Theory
- Binary Tree – Array Based Implementation
- Binary Tree- Recursive Traversals
- Binary Tree- Pointer Based Storage
- Difference in Procedural languages and object oriented languages
- Benefits of OOP
- Introduction to C++
- Creating a simple C++ program with input and output
- Objects, classes, creating objects & classes
- General introduction about encapsulation, abstraction, inheritance and polymorphism
- Explaining encapsulation and abstraction
- Implementing functions in the class
- Use of scope resolution operator
- Public & private modifiers
- Static functions and static data members
- Constructor (default, copy, parameterized) and destructors, array of objects
- Array of objects
- Understanding operator overloading
- Operators to be overloaded +, -, ++, --, <<, >>, <=, >=, =
- Access modifiers – protected, public, and private and default
- Creating a derived class
- Overloading parent class functions
- Understanding calling of functions and constructors with the help of examples
- Different types of inheritance-
- Single inheritance
- Multiple inheritance
- Multi-level inheritance
- Hybrid inheritance