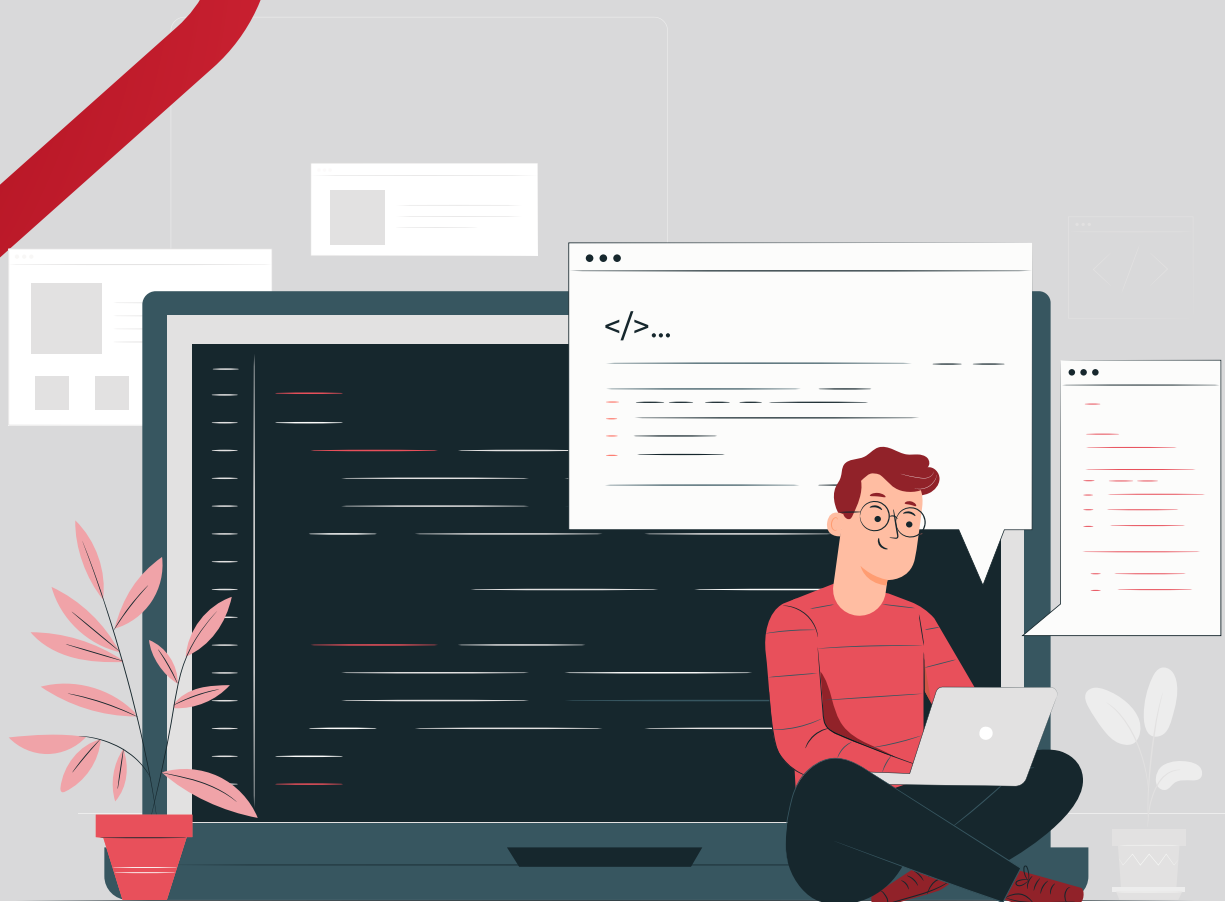
IT EDUCATION CENTRE

C and C++ Programming



Principle of Object oriented Programming

- Introduction
- Basic concept of Object oriented Programming
- Features of OOP
- Uses of OOP
- C vs C++

Beginning with C++

- What is C++
- A simple C++ program
- More C++ steatments
- An example with class
- Structure of C++ program
- Compiling and linking

Tokens, Expression and Control statement

- Introduction
- Tokens
- Keywords
- Identifiers and constants
- Basic data type
- Derived data type
- Varibles
- Operator
- Scope resolution operator
- Qperator overloading
- Opertor precedence
- Control statements

Function

- Introduction
- Main function
- Function prototype
- Call by value
- Call by referance
- Inline function
- Friend function

Classes and Object

- Introduction
- Structures revisited
- Write a C++ program with class
- Objects
- Static data member
- Static member function

Constructor

- Introduction
- Constructor
- Parametrized Constructor
- Copy constructor
- Destructor

Inheritance

- Introduction
- Defined Derived class
- Single Inheritance
- Multilevel Inheritance
- Hierarchical Inheritance
- Hybrid Inheritance
- Multiple Inheritance
- Abstract class

Overloading

- Introduction
- Function Overloading
- Operator Overloading
- Function Overriding

Virtual Function and Polymorphism

- Introduction
- this pointer
- Virtual function
- Pure virtual function

Managing console I/o Opearations

- Introduction
- fstream
- ifstream
- ofstream

Exception Handling

- Introduction
- Advantage
- Exception Classes
- Exception Handling Keywords
- try/catch
- User-Defined Exceptions

Strings

- Introduction
- String functions

GitHub

- Creating a Git Account
- Cloning the repository
- Adding the file
- Committing the file
- Git push
- Removing the file