



- Courses For Event WT2017 C++ Programming

- [C++ Programming Fundamentals](#)
- [C++ Competitive Programming](#)

- Topics For C++ Programming Fundamentals

- Introduction To C++
- Structure of C++ Program
- C++ Variables and Data Types
- C++ Arithmetic Operators
- C++ Relational Operators
- C++ Logical Operators
- C++ Assignment/Compound Assignment Operators
- C++ Ternary Operators
- Bitwise Operator
- The IF Statement
- The Switch Statement
- For Loop
- While Loop
- Do-While Loop
- Arrays In C++
- MultiDimensional Array
- Enumerators
- Tokens, Digraph and Trigraph Sequences
- Functions In C++
- Inline Functions
- Overloaded Functions
- Recursive Functions
- Understanding Pointers
- Null Pointers
- Pointer To An Array
- Passing Pointers To Functions
- Classes And Objects
- Adding Private Members To Classes
- Adding Public Members To Classes
- Adding Protected Members to Classes



- Constructor In C++
- Default Constructor
- Parameterized Constructor
- Copy Constructor
- Constructor Overloading
- Destructor
- Array Of Objects
- Introduction To Inheritance
- Single Inheritance
- Multiple Inheritance
- Multilevel Inheritance Part-1
- Multilevel Inheritance Part - 2
- Polymorphism : Method Overloading
- Polymorphism : Method Overriding
- Operator Overloading
- Using Namespace
- Stack In C++
- Queue In C++
- Map In C++ Part 1
- Map In C++ Part 2
- C++ Dynamic Memory Allocation (New and Delete)
- Overloading New And Delete Operator
- Null Terminated String
- C++ Pre Processors
- Header and Source Files

This course ends on 06 January 2018

• Topics For C++ Competitive Programming

- Define competitive programming
- Types of competitive programmers
- How to become a competitive programmer: Type fast & correct
- How to become a competitive programmer: Identification of problems



- Introduction to Competitive problems: Complete search
- Analysis of Array, Vector, Counter and Index
- Bit Manipulations in C++ and Java
- Concepts of Stack, Queue and Deque in C++
- Set and Map in C++
- Priority Queue in C++
- Priority Queue in C++
- Practice Problem on Priority Queue - Little Monk and Virat
- Graph using Adjacency List in C++
- Graphs using Adjacency Matrix in C++
- Graph: Breadth First Search
- Graph: Depth First Search in C++

This course ends on 13 January 2018