



BASICS

The basics of the C language

Date Prepared: 19/01/2024

Course Introduction: Basics of C Programming

Welcome to our course on the fundamentals of C programming! In this course, we will take you through the essential concepts and techniques necessary to begin your journey in the world of programming using the C language.

Course Overview:

- **Introduction to C**

- Understanding the history and significance of the C programming language.
- Setting up your development environment.

- **Variables and Data Types**

- Learning about variables and their types.
- Exploring the basic data types in C: int, float, double, char, etc.
- Understanding variable declaration and initialization.

- **Specifiers and Modifiers**

- Introducing specifiers and modifiers in C.
- Explaining the role of specifiers such as 'const'.

- **User Input and Output**

- Implementing user input using 'scanf()' and 'fgets()'.
- Displaying output using 'printf()'.
- Handling basic input/output operations in C.

- **Mathematics in C**

- Utilizing mathematical functions provided by the standard library 'math.h'.
- Exploring mathematical operations and functions such as 'sqrt()', 'pow()', 'sin()', 'cos()', 'tan()', etc.
- Performing arithmetic operations in C.

Course Objectives:

By the end of this course, you will:

- Understand the fundamentals of the C programming language.
- Be able to declare and manipulate variables effectively.
- Grasp the concept of specifiers and modifiers in C.
- Implement user input and output operations.
- Utilize mathematical functions provided by the 'math.h' library for various computations.

This course is designed for beginners with little to no prior experience in programming.

Whether you're a student, an aspiring programmer, or someone looking to expand their skill set, this course will provide you with a solid foundation in C programming.

