

# **Practical Programming in C**

#### Introduction:

In this course, you will learn to write computer programs in C language. This course is designed to help you build good programming skills and cultivate systematic thought process while you learn to effectively and appropriately use various aspects of C programming language to solve various computing problems. This is a suitable course for getting more clarity on the programming aspects.

This course helps you lay a strong foundation in programming such that you can further explore other programming languages with ease and explore interesting domains such as computer networking and embedded systems.

By the end of the course, you will be assigned some mini-projects which can enhance your resume.

#### Objectives:

By the end of this course, you should be able to:

- Think systematically and apply your thought process to develop a C program to solve a given computing problem
- Use C language constructs effectively
- Appropriately use pointers in your programs
- Have a good understanding of implementing linked lists in C
- Make use of file input-output operations in your programs
- Implement algorithms in C
- Explain how C can be used for programming embedded systems
- Confidently face interviews on C language

### **Pre-requisites:**

Basic knowledge in computer operations should be more than sufficient.



#### Who should attend?

This course work is designed for students and professionals who desire to enhance their programming skills.

### Package:

### Stage 1:

- 1. Fundamentals of computer organization
- 2. Introduction to C language and its build process
- 3. Variables, operators and expressions
- 4. Conditional constructs: if, case
- 5. Loops
- 6. Arrays
- 7. Functions and recursion
- 8. Structures and unions
- 9. File I/O

### Stage 2:

- 10. Storage classes
- 11. Pointers in C
- 12. Pointers and arrays
- 13. Pointers and strings
- 14. Pointers and functions
- 15. Pointers structures

## Stage 3:

- 16. Introduction to data structures
- 17. Linked lists
- 18. Introduction to developing algorithms in C
- 19. Applications of C in Computer Networking
- 20. Applications of C in Embedded Systems



Cost:

Rs. 1500/-

## Mode of delivery:

1. Class-room sessions: 10 sessions

2. Online: 15 sessions