



Course Contents of C

Introduction

The C Language and its Advantages
The Structure of a C Program
Writing C Programs
Building an Executable Version of a C Program
Debugging a C Program
Examining and Running a C Application Program

Data Types and Variables

Data Types
Operands, Operators, and Arithmetic Expressions

Input/Output Management

The Input/Output Concept
Formatted Input Function

Control-Flow Statements

The Control-Flow Program Statements
Looping Statements
The Data-checking process

Modular Programming with Functions

The C Function
Passing Data to Functions
Passing an Address to Modify a Value in

Memory

Using Functions in the Checkbook Program
C Standard Library Functions

Arrays, Pointers, and Strings

Arrays , Pointers , Strings
Using Arrays, Strings, and Pointers in the Checkbook Program

Structures

Structures
Arrays of Structures
Passing Structures to Functions
Nesting Structures

The Pre-processor and Multiple-file Compilation

The C Preprocessor
The Conditional Compilation Directives
Global Variables and Variable Storage
Classes
Program Organization and Multi-file
Compilation

File Input/Output

Command-line Arguments
Combining Command-line Arguments and File I/O
File Input and Output