

C Programming Notes: Unit 1 - Introduction

Contents

1	Introduction to C Programming	2
1.1	History and Importance	2
1.2	Features of C	2
1.3	Basic Structure of a C Program	2
1.4	Setting up the Environment	2
1.5	First Program	2
1.6	Compilation and Execution	2

1 Introduction to C Programming

C is a procedural programming language developed by Dennis Ritchie in the early 1970s. It has a long history of use in operating systems, embedded systems, and other high-performance applications due to its efficiency and control.

1.1 History and Importance

C was developed as a system implementation language for the Unix operating system.

1.2 Features of C

- Simple and efficient
- Rich set of built-in functions
- Portability
- Extensibility

1.3 Basic Structure of a C Program

```
#include <stdio.h>

int main() {
    printf("Hello, World!");
    return 0;
}
```

1.4 Setting up the Environment

To write and run C programs, you need a compiler such as GCC.

1.5 First Program

Explanation of the "Hello, World!" program, including `#include`, `main()`, and `printf()`.

1.6 Compilation and Execution

Steps to compile and execute a C program using the terminal.