

C Programming Notes

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1 Introducing C

1.1 History of C

Origins

C is a by-product of the UNIX operating system, which was developed at Bell Labs by Dennis Ritchie

Standardization

C-Based Languages

1.2 Strengths and Weaknesses of C

Strengths

- Efficiency
- Portability
- Power
- Flexibility
- Standard Library
- Integration with UNIX
- C is particularly powerful in combination with UNIX(including the popular variant known as Linux). In fact, some UNIX tools assume that the user knows C.

Weaknesses

Effective Use of C

this is the content

```
// Hello.c
#include <stdio.h>

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

2 C Fundamentals

2.1 Writing a Simple Program

Program: Printing a Pun

pun.txt

2.2 The General Form of a Simple Program

2.3 Comments

2.4 Variables and Assignment

2.5 Reading Input

2.6 Defining Names for Constants

2.7 Identifiers

2.8 Layout of a C Program

3 Formatted Input/Output

3.1 The printf Function

Conversion Specifications

Program: Using printf to Format Numbers

Escape Sequences

3.2 The scanf Function