

# 0. INTRODUCING C

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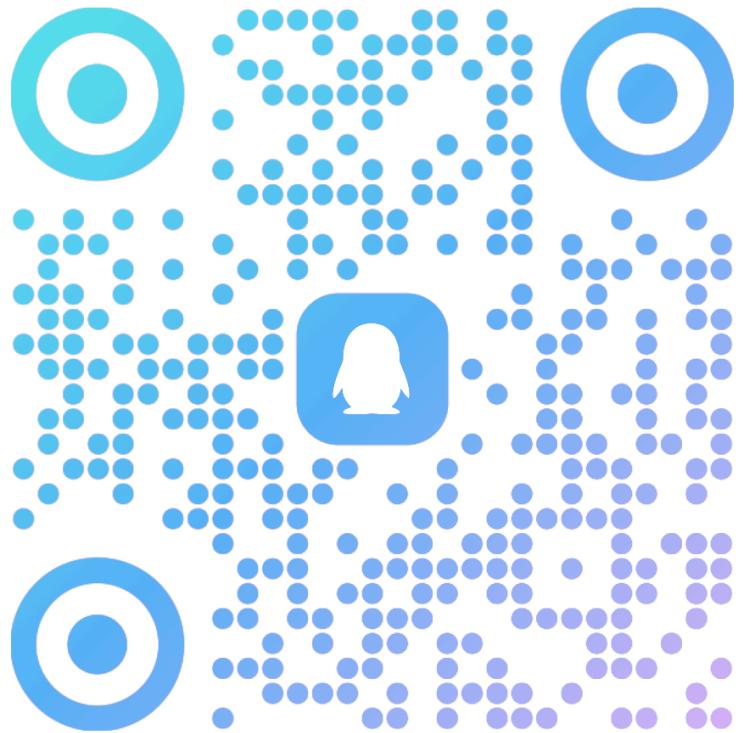


Sep. 19, 2024



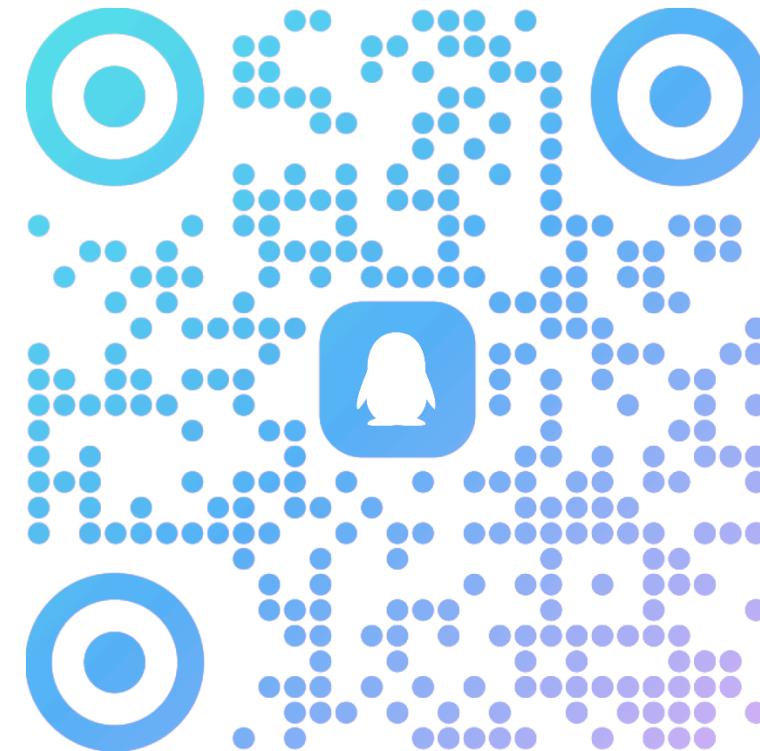
**2023-CPL-WEI**

群号: 1003531011

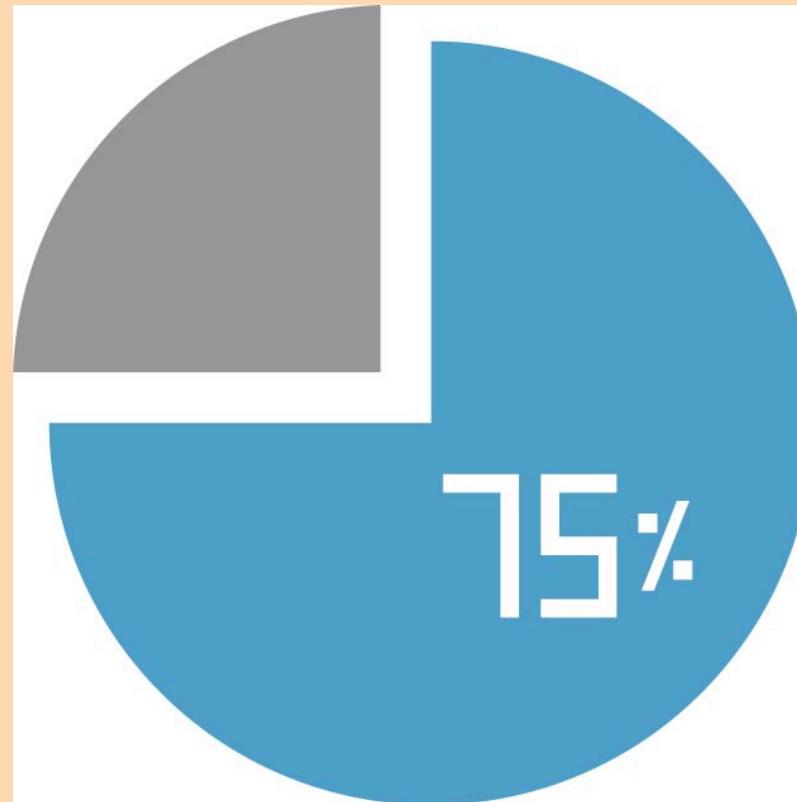


**2024-CPL-答疑群**

群号: 893689398

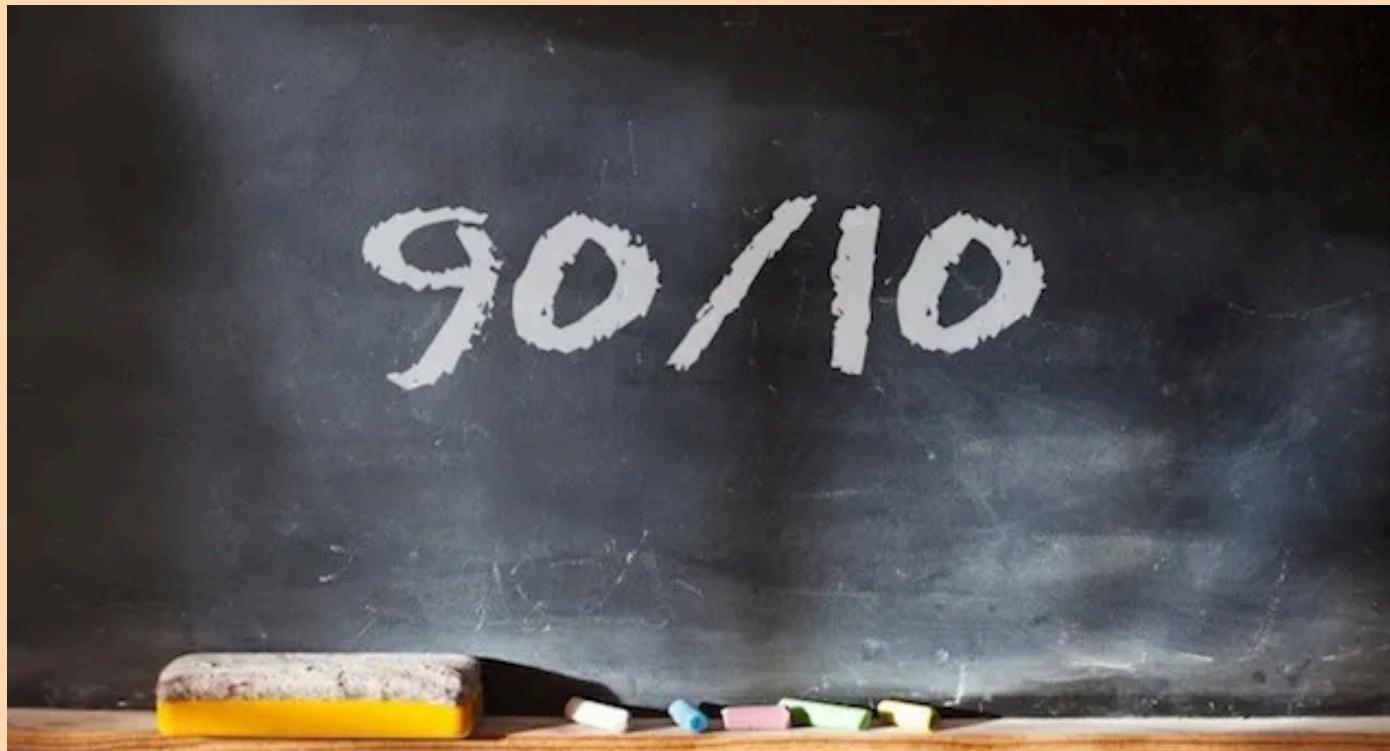


# Questionnaire (1)



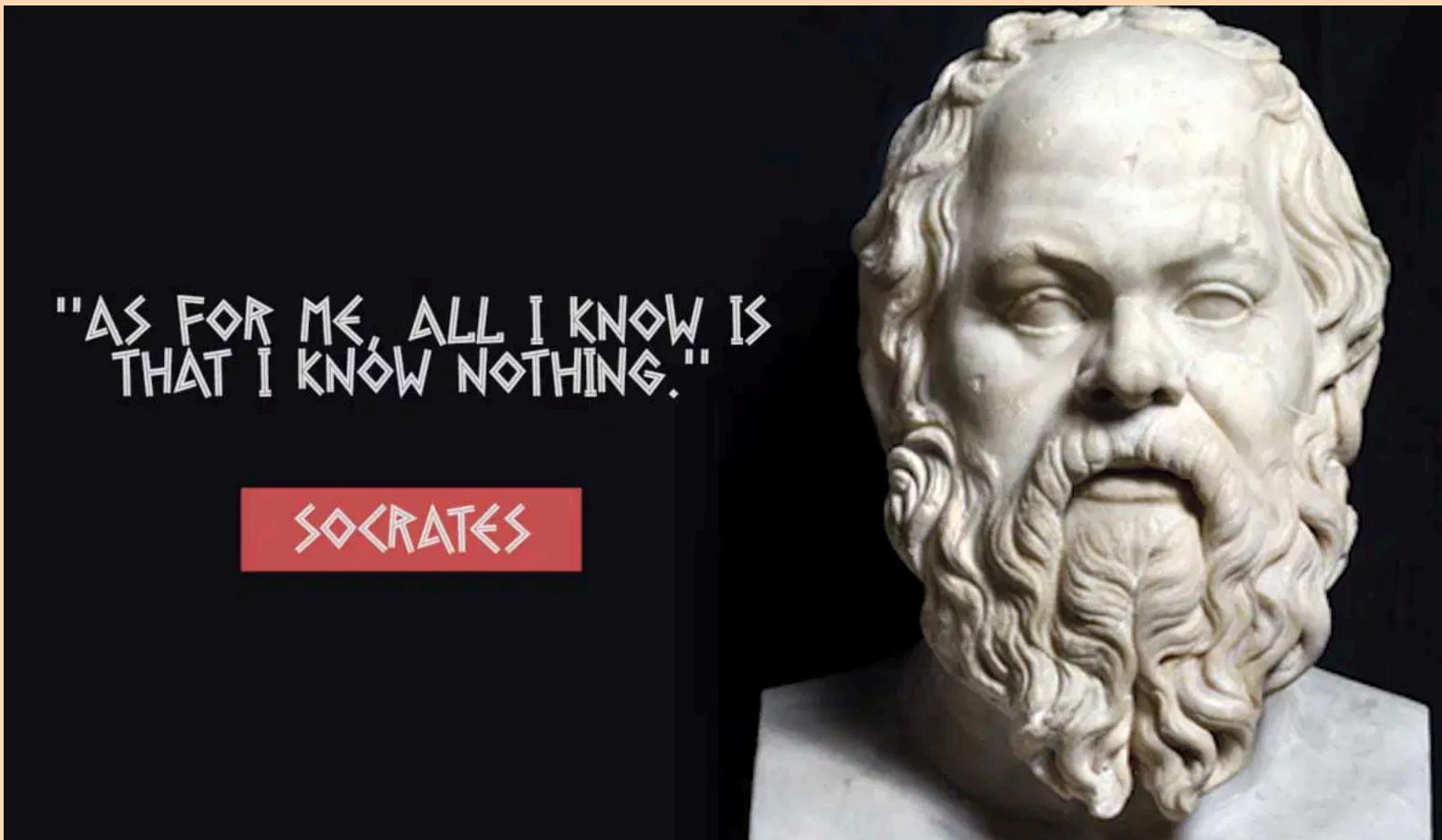
75% of students are new to programming.

# Questionnaire (2)



10% of students attended in some programming contests.

# The C Beginners



# The C Beginners



# To The C Beginners

**DON'T  
PANIC!**

# **From Beginners to Masters**

## **Programming**

## **De-Programming**

# cpl-docs: docs.cpl.icu



C 语言程序设计基础  
C Programming Language

Q 搜索

- > 课程简介
- > 课程评价指标
- > 编程练习与题解
- > 抄袭与惩罚
- > 助教与答疑
- > C 语言开发环境
- > 课程资源
- > 编程风格
- > 往年 FAQ
- > 杂项

# Scores

- ~~考勤 (非必要不点名)~~
- 平时编程练习 (10 分)
- 阶段机试 1 (15 分)
- 阶段机试 2 (20 分)
- 期末机试 (30 分)
- 期末项目 (25 分)



# No Plagiarism!!!



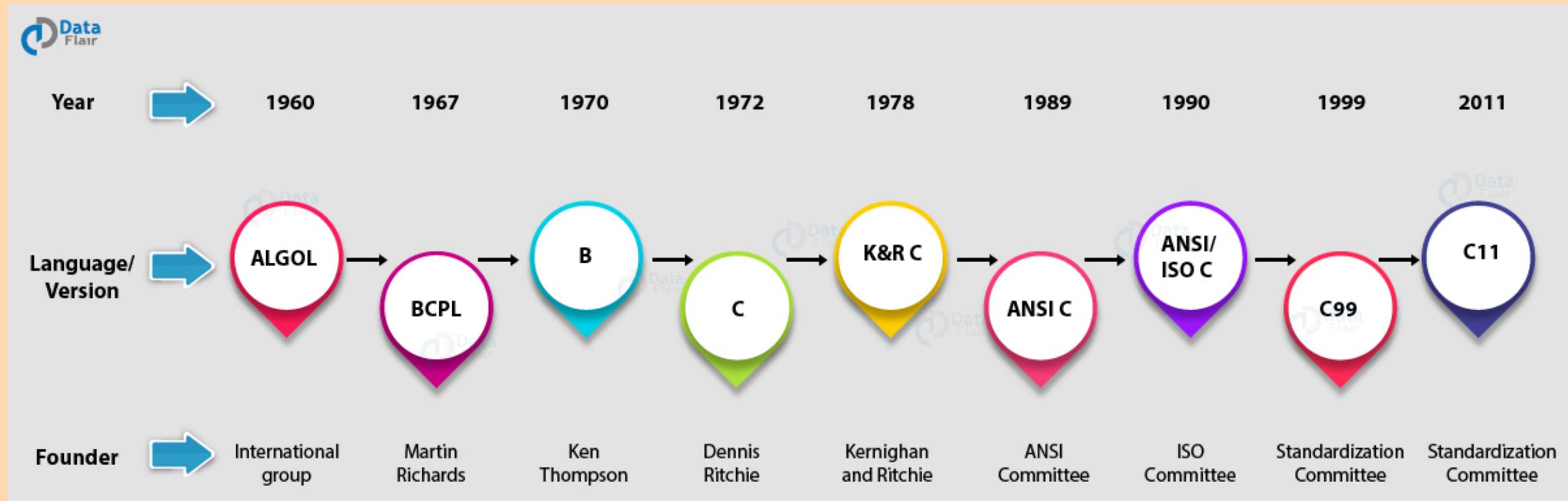
**编程练习:** 每次扣 5 分, 10 分扣完为止; **期末项目:** 项目分数清零

# ASK ME ANYTHING

GREAT MINDS  
DISCUSS IDEAS

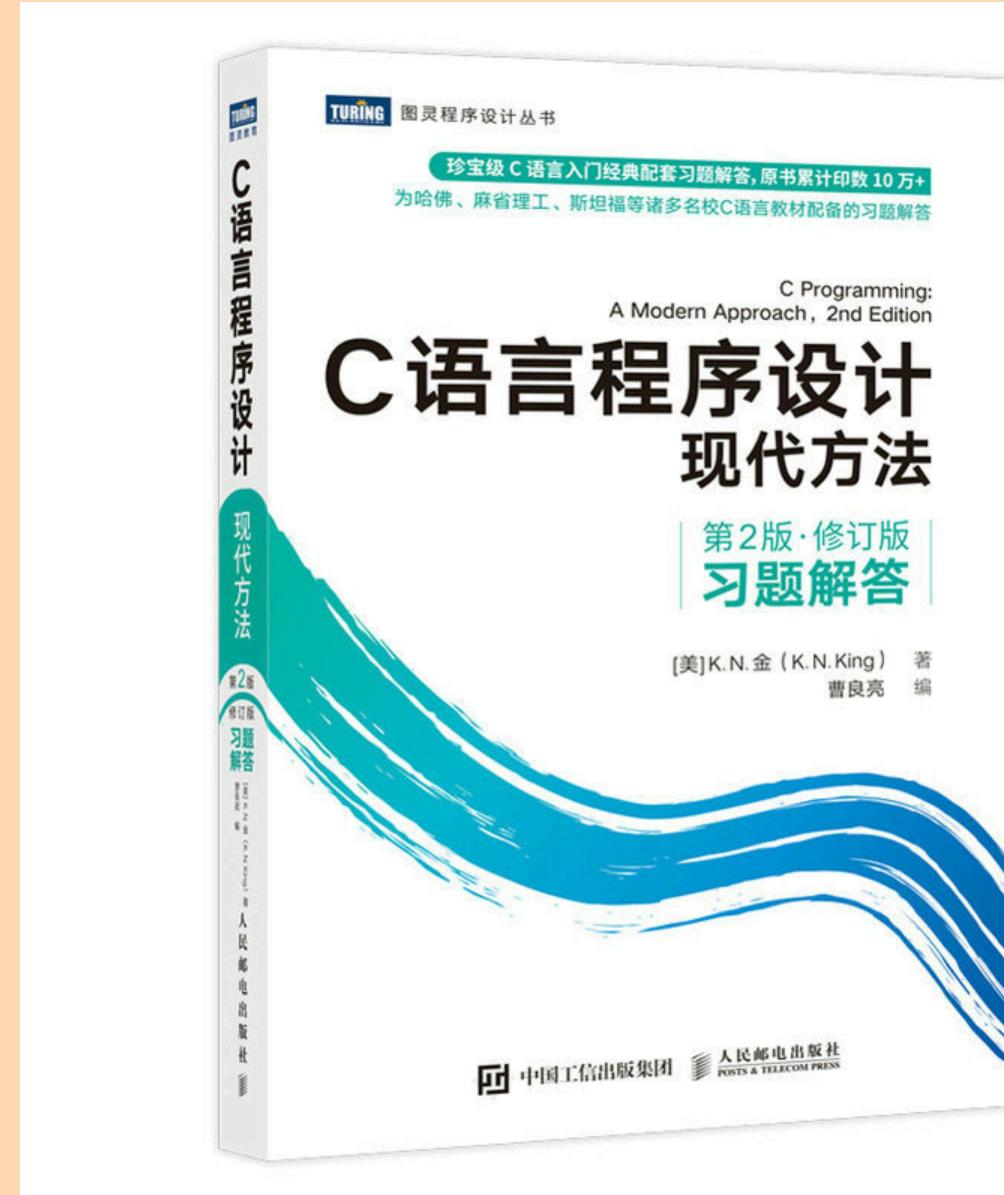
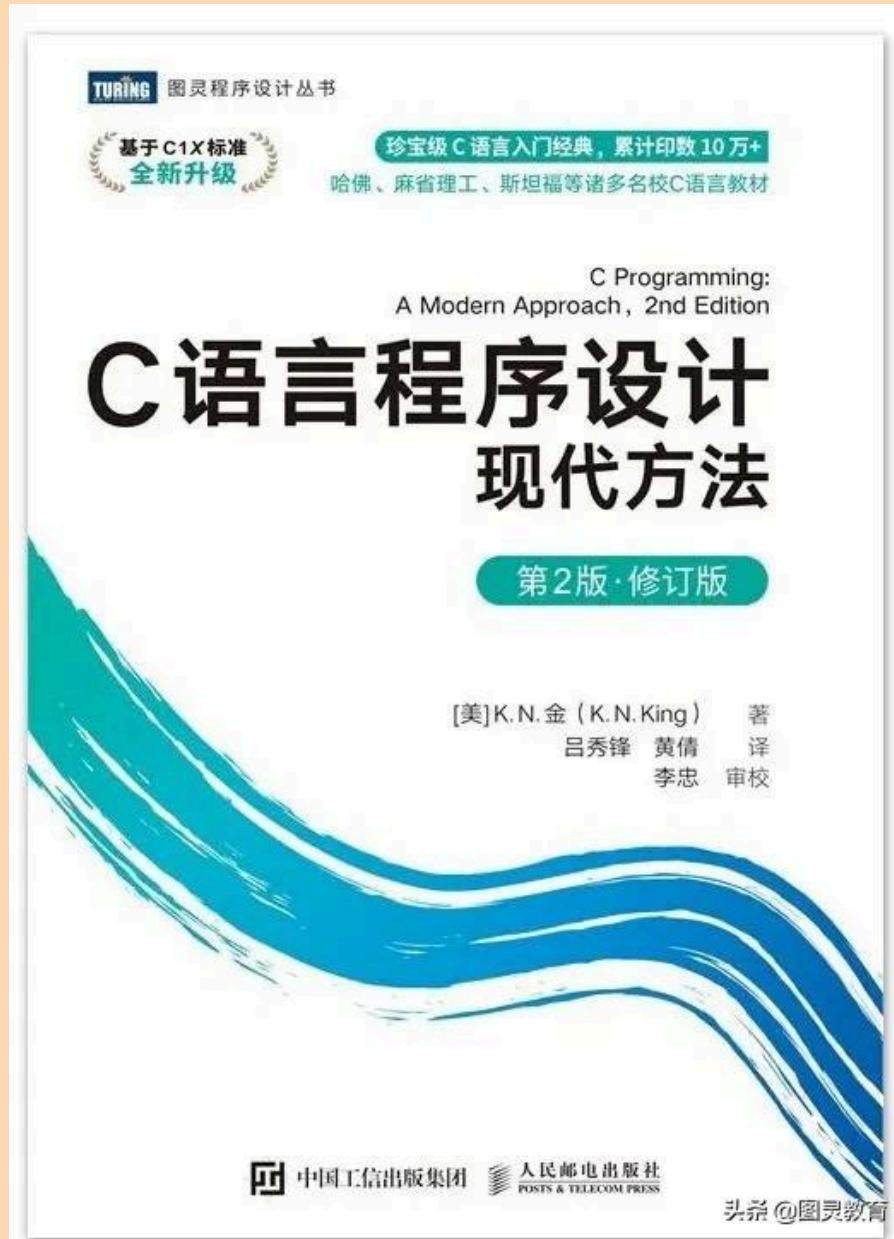
## About the 2024CPL Class

# A Brief History of C @ cprefere~~n~~ce [C17; C23]



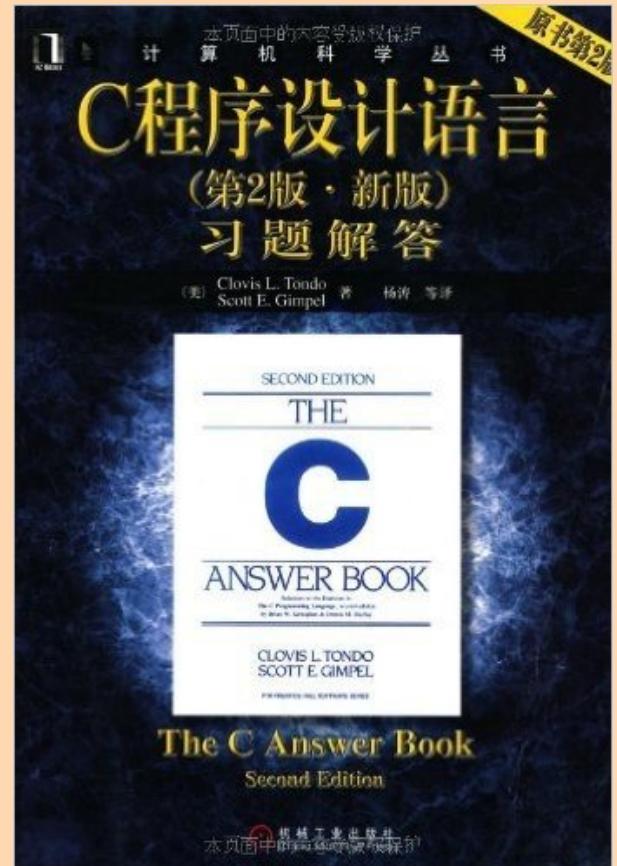
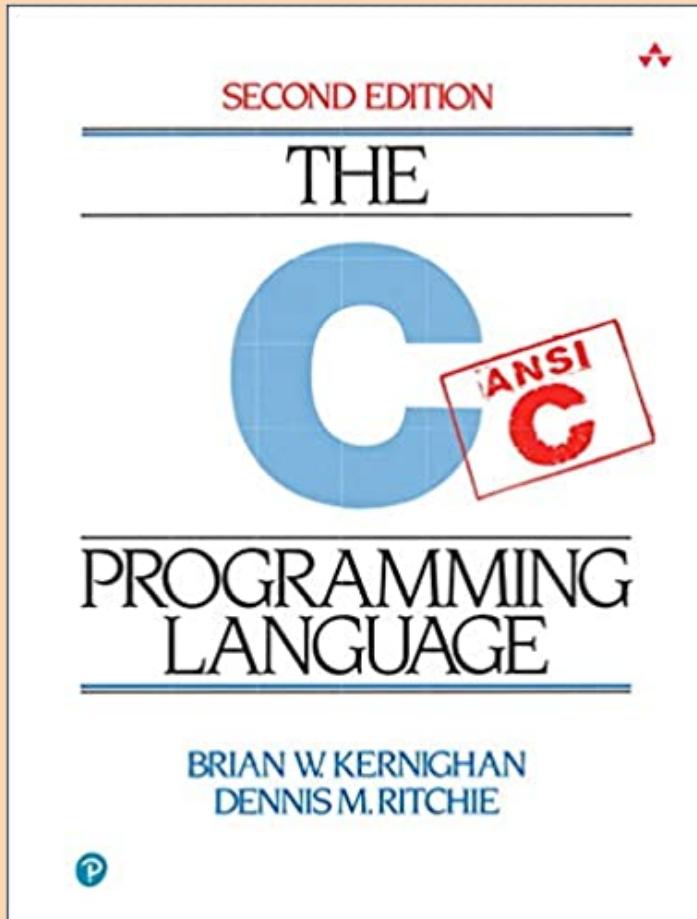
You do *NOT* need to be a **language lawyer!**







# K&R C Bible (1978; 1988)



PEARSON

C和C++实务精选  
品味岁月积淀，读享技术菁华

# C Primer Plus

(第6版) 中文版

C Primer Plus  
Sixth Edition

- 经久不衰的C语言畅销经典教程
- 针对C11标准进行全面更新



[美] Stephen Prata | 著  
姜佑 | 译



中国工信出版集团



人民邮电出版社  
POSTS & TELECOM PRESS

Stephen Prata

Sixth Edition

# C Primer Plus



**POISON**

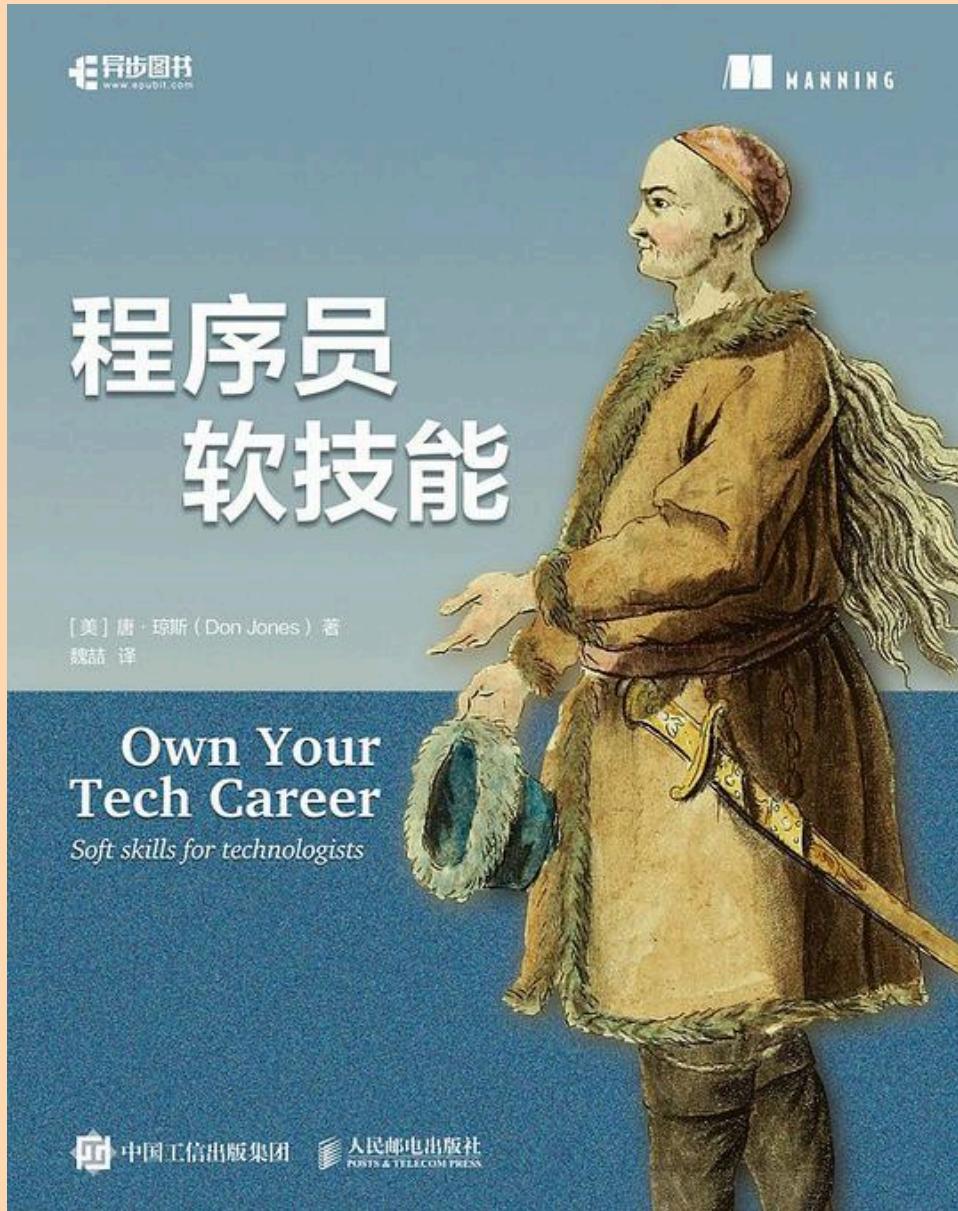


**If You're  
Not Sure, Ask**

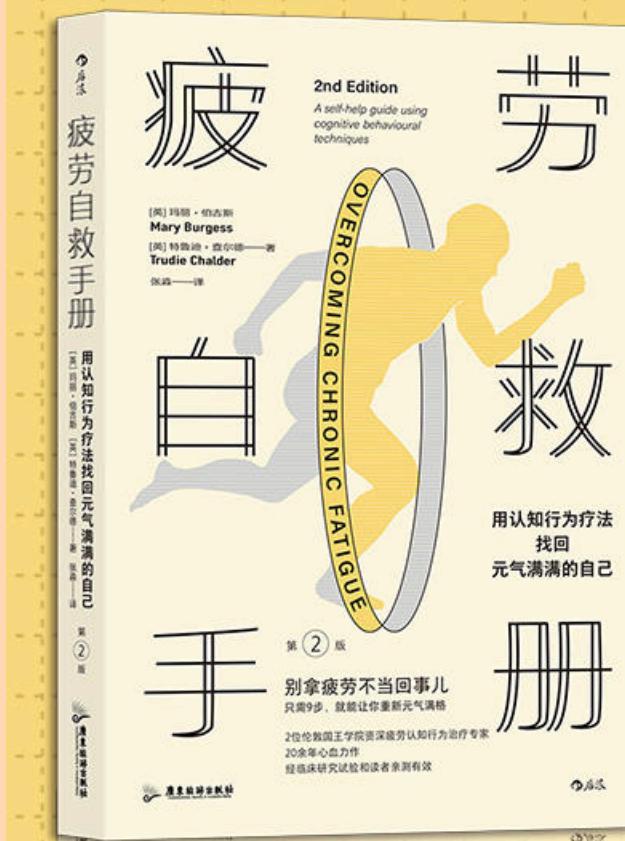




**More Books in the Class . . .**



# 别拿疲劳不当回事儿



## 9步让你 重新元气满格

1. 观察你的活动与睡眠模式，了解疲劳是如何对你产生影响的
2. 设定让自己生活更愉快、更平衡的目标
3. 改善睡眠质量，稳定活动和休息模式

"TALK IS  
**CHEAP.**  
SHOW ME THE  
**CODE.**"  
-LINUS TORVALDS

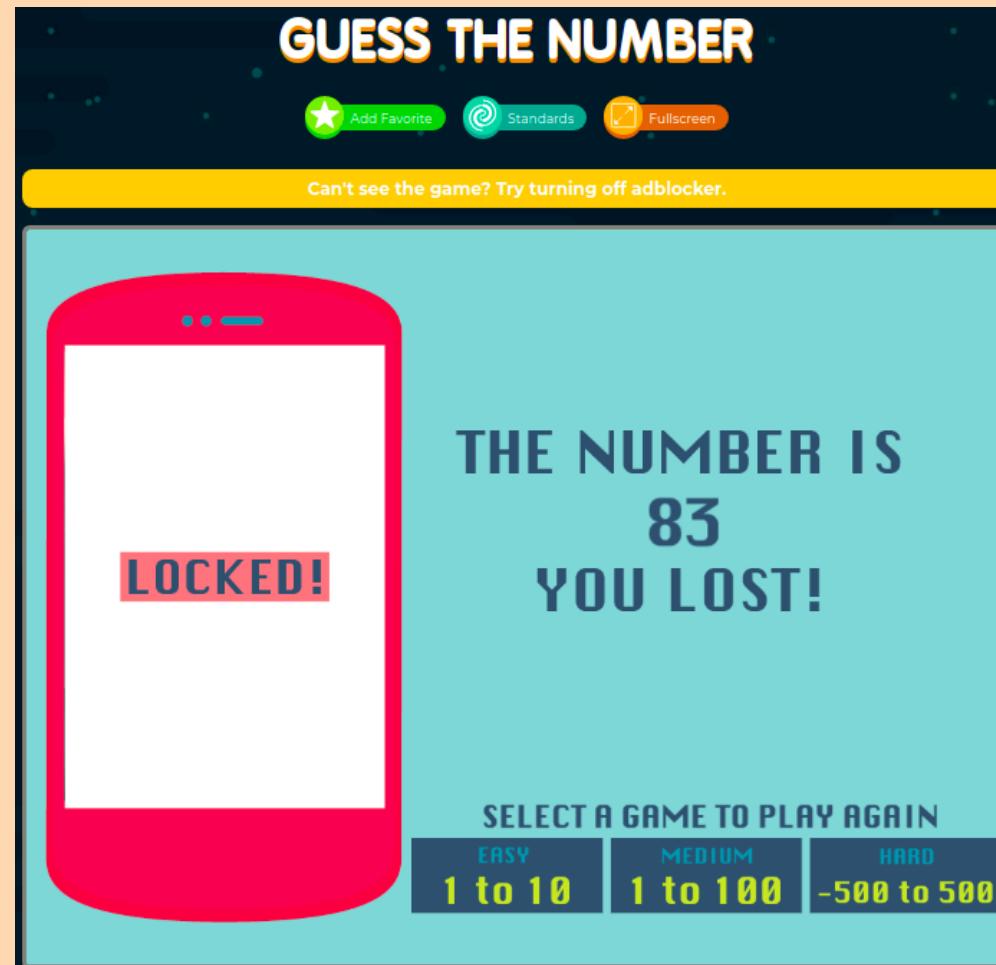


<Hello World/>

```
main()
{
    printf("Hello, world\n");
}
```

Zin Koht

# Game: Guess the Number



## Game: Guess the Number

Programming is *NOT*(only) about languages.

You learn C to express **YOUR IDEAS** with  
**COMPUTERS.**

# c reference

## C reference

C89, C95, C99, C11, C17, C23

### Language

Basic concepts  
Keywords  
Preprocessor  
Expressions  
Declaration  
Initialization  
Functions  
Statements

### Headers

### Type support

### Program utilities

### Variadic functions

### Error handling

### Dynamic memory management

### Date and time utilities

### Strings library

Null-terminated strings:  
byte – multibyte – wide

### Algorithms

### Numerics

Common mathematical functions

Floating-point environment (C99)

Pseudo-random number generation

Complex number arithmetic (C99)

Type-generic math (C99)

### Input/output support

### Localization support

### Atomic operations library (C11)

### Thread support library (C11)

### Technical specifications

**Dynamic memory extensions** (dynamic memory TR)

**Floating-point extensions, Part 1** (FP Ext 1 TS)

**Floating-point extensions, Part 4** (FP Ext 4 TS)

External Links – Non-ANSI/ISO Libraries – Index – Symbol Index

# Game: Guess the Number

**Program = Input + Data + Operations + Output**

# ASK ME ANYTHING

GREAT MINDS  
DISCUSS IDEAS

Thank  
You!