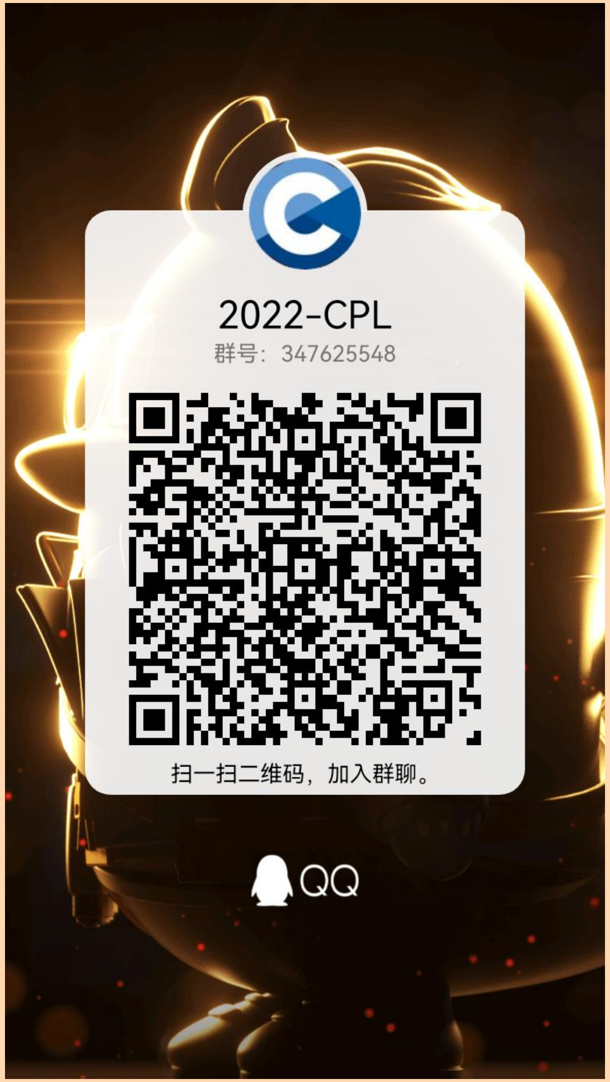
0: Introducing C

Hengfeng Wei (魏恒峰)
hfwei@nju.edu.cn

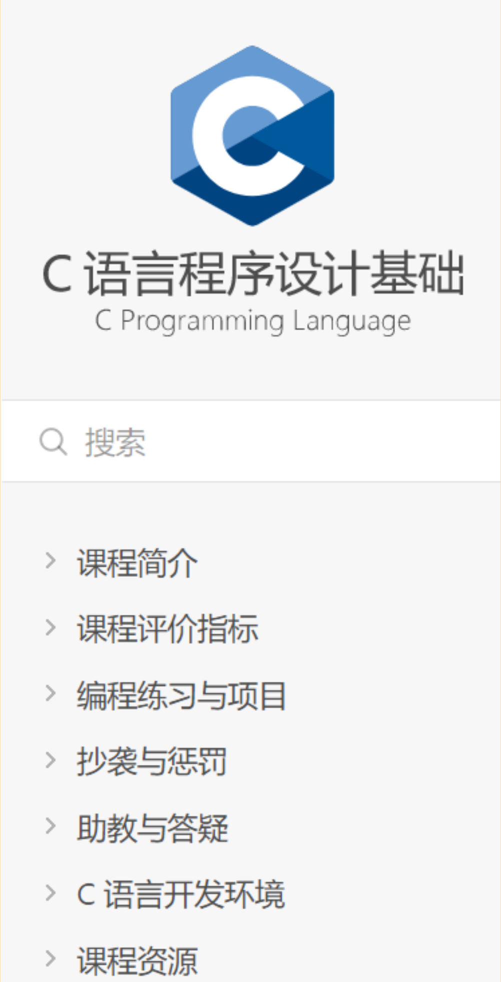


2022-CPL

群号：347625548

扫一扫二维码，加入群聊。

cpl-docs: docs.cpl.icu, http://47.122.3.40/



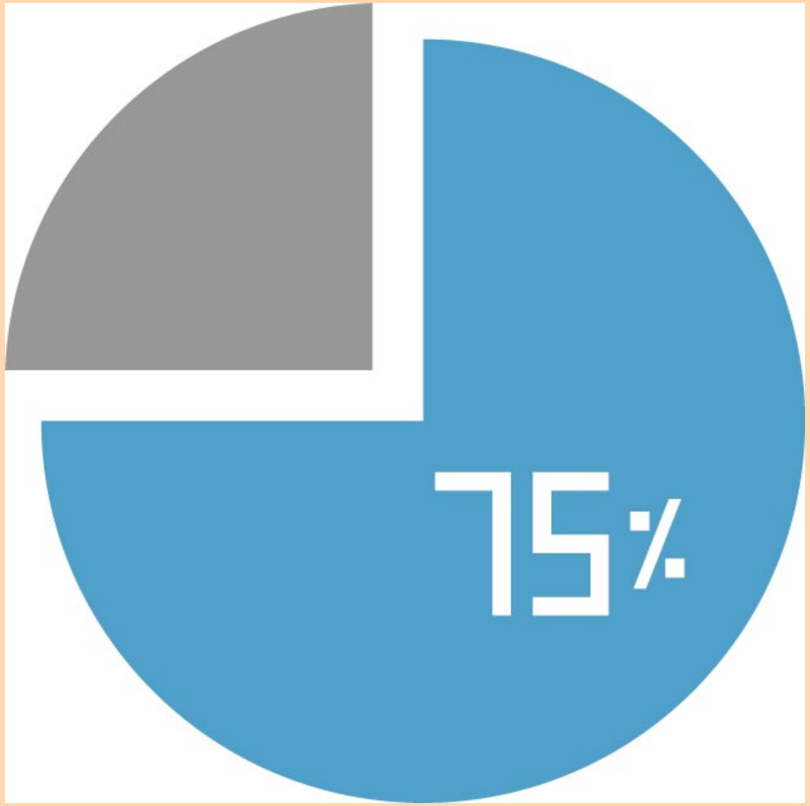
C 语言程序设计基础

C Programming Language

搜索

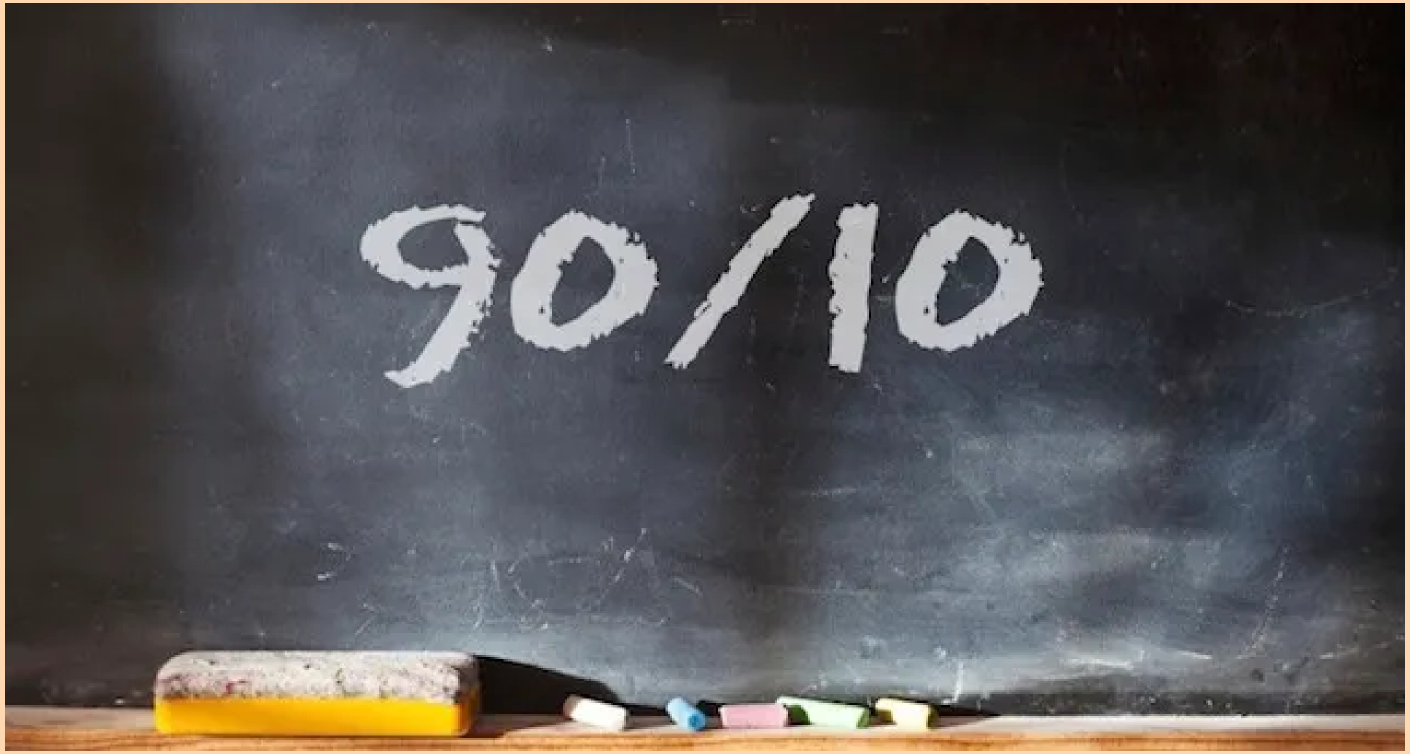
- 课程简介
- 课程评价指标
- 编程练习与项目
- 抄袭与惩罚
- 助教与答疑
- C 语言开发环境
- 课程资源

Questionnaire (1)



75% of students are new to programming.

Questionnaire (2)



10% of students attended in some programming contests.

To C Beginners

From Beginners to Masters

Programming

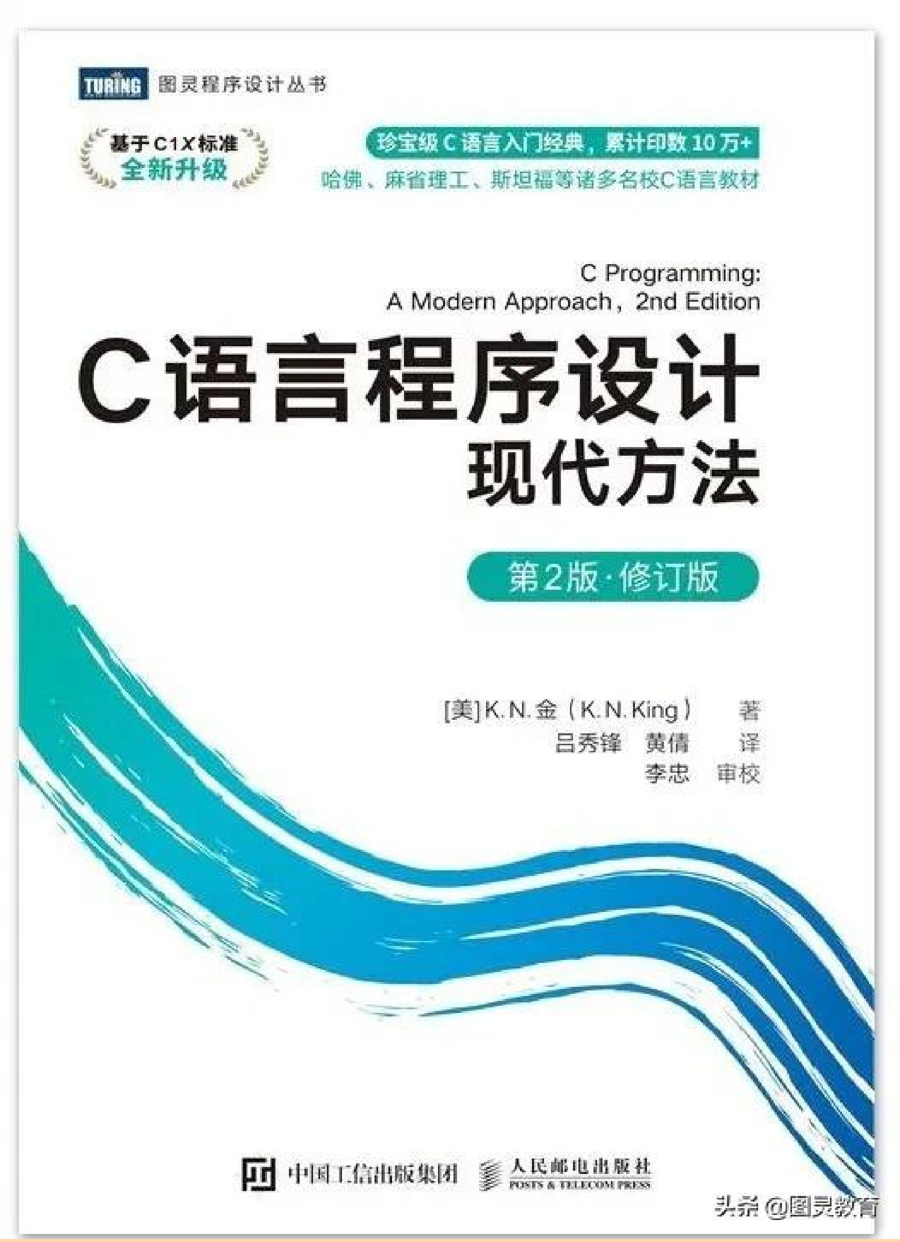
De-Programming

Scores

- ~~考勤~~
- ~~期中测试~~
- ~~期末笔试~~
- 编程练习 (40 分)
- 期中项目 (20 分)
- 期末项目 (10 分)
- 期末机试 (30 分)

No Plagiarism!!!

前两次总评各扣 10 分, 第三次直接判为不及格



TURING 图灵程序设计丛书

基于C1X标准 全新升级

珍宝级C语言入门经典，累计印数10万+

哈佛、麻省理工、斯坦福等诸多名校C语言教材

C Programming:
A Modern Approach，2nd Edition

C语言程序设计
现代方法

第2版·修订版

[美]K.N.金（K.N.King） 著
吕秀锋 黄倩 译
李忠 审校

中国工信出版集团 人民邮电出版社 POSTS & TELECOM PRESS

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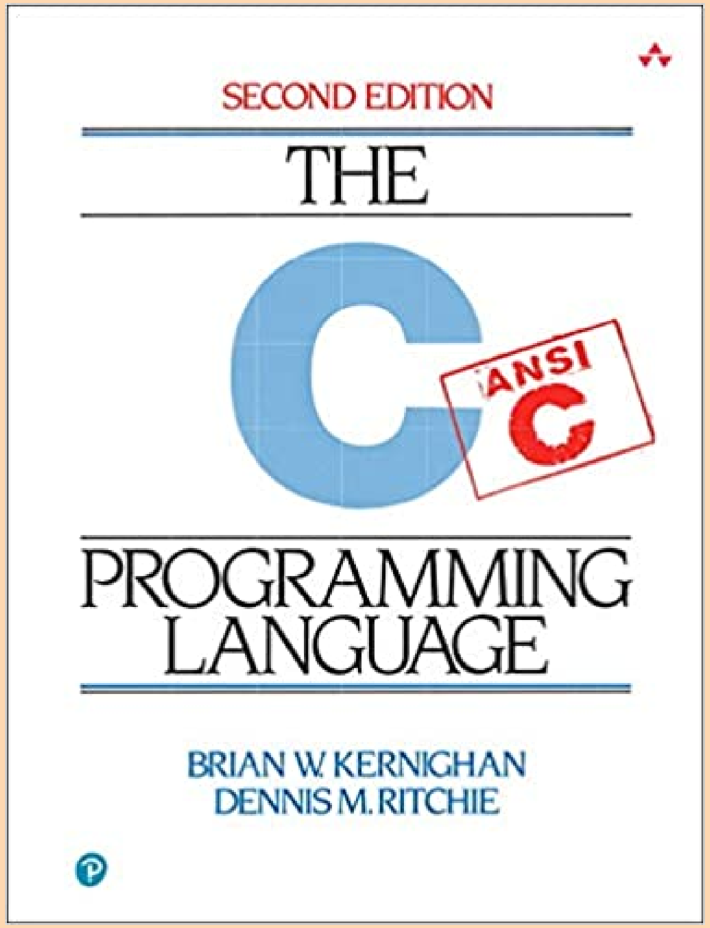
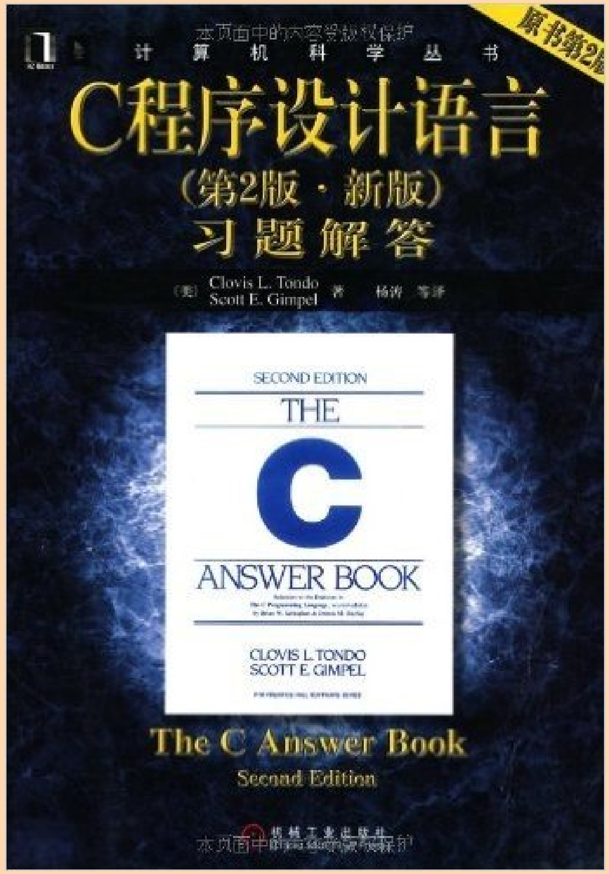
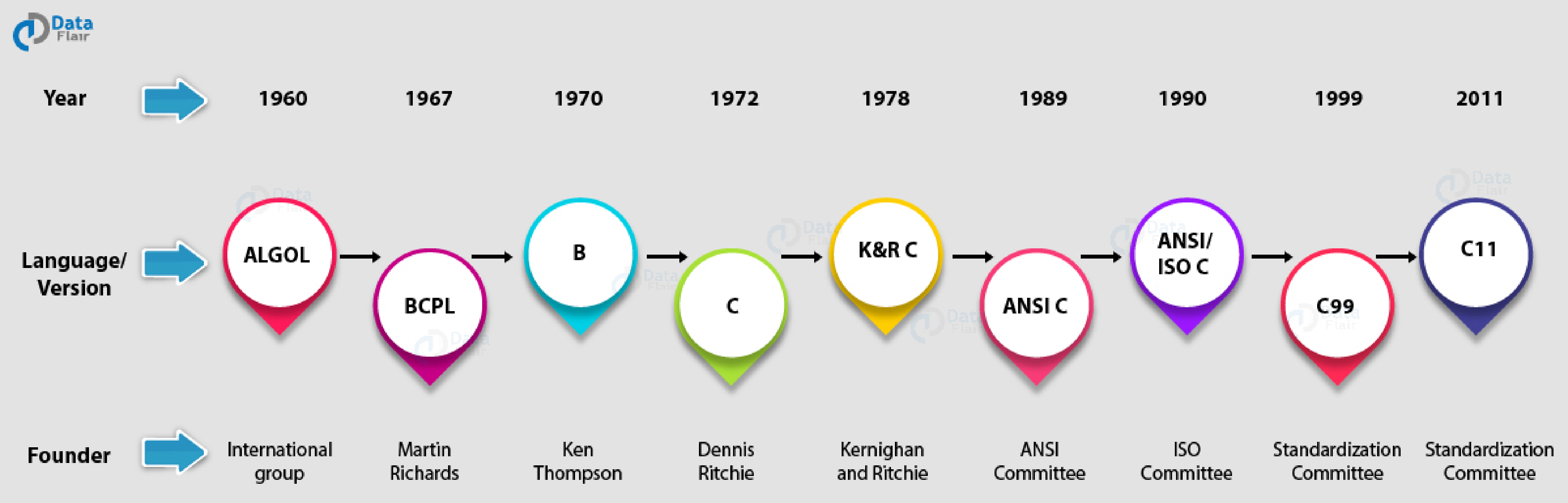
K&R C Bible (1978; 1988)





A Brief History of C

History of C @ cppreference



Year	1960	1967	1970	1972	1978	1989	1990	1999	2011
Language/ Version	ALGOL	BCPL	B	C	K&R C	ANSI C	ANSI/ ISO C	C99	C11
Founder	International group	Martin Richards	Ken Thompson	Dennis Ritchie	Kernighan and Ritchie	ANSI Committee	ISO Committee	Standardization Committee	Standardization Committee

Do *NOT* become a **language lawyer**!

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

……

疲劳自救手册
2nd Edition
A self-help guide using cognitive behavioural techniques
OVERCOMING CHRONIC FATIGUE
[英] 玛丽·伯吉斯
Mary Burgess
[英] 特鲁迪·查尔德——著
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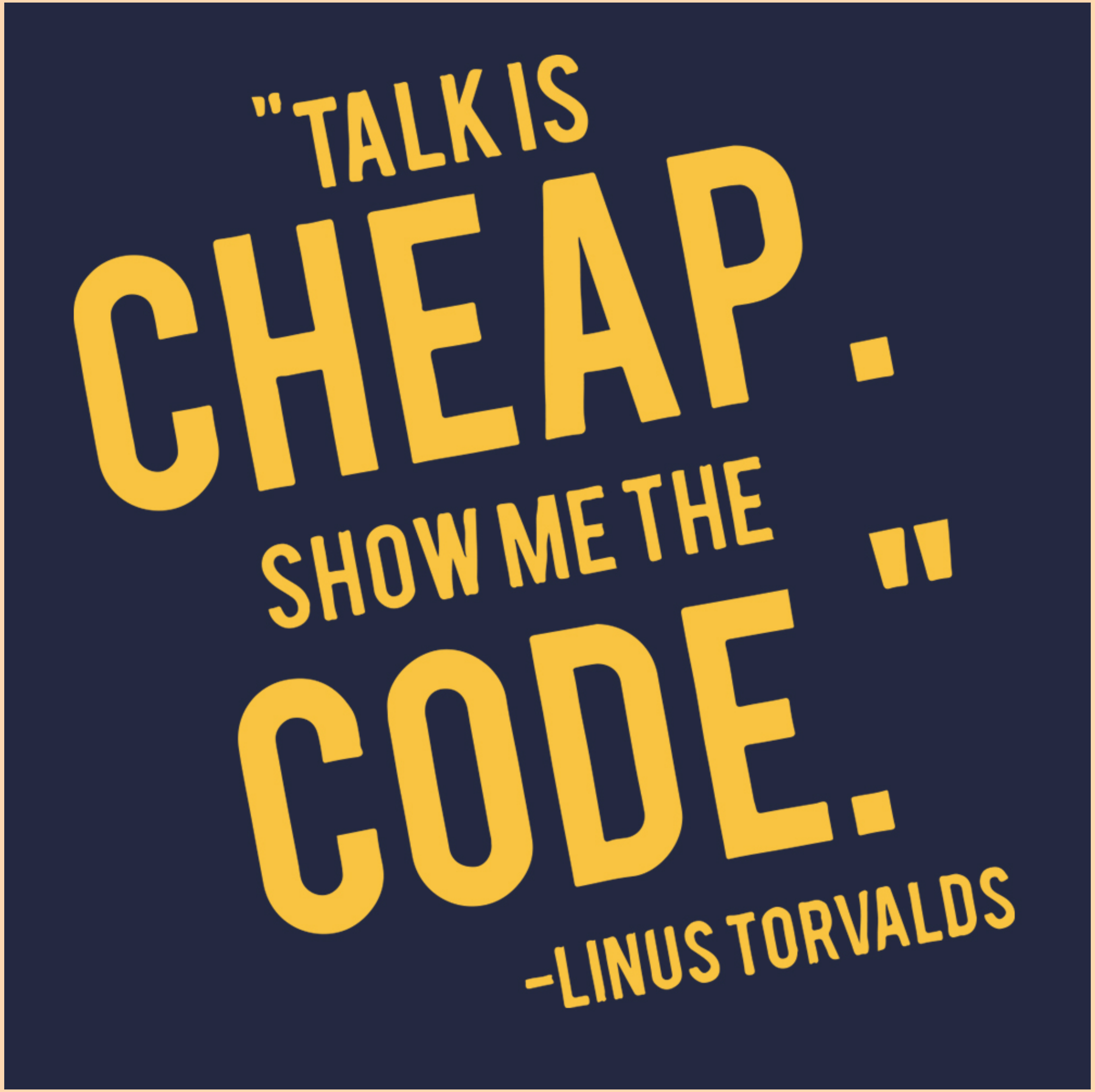
张森——译
用认知行为疗法找回元气满满的自己
第2版
别拿疲劳不当回事儿
只需9步，就能让你重新元气满格
2位伦敦国王学院资深疲劳认知行为治疗专家
20余年心血力作
经临床研究试验和读者亲测有效
广东旅游出版社
后浪

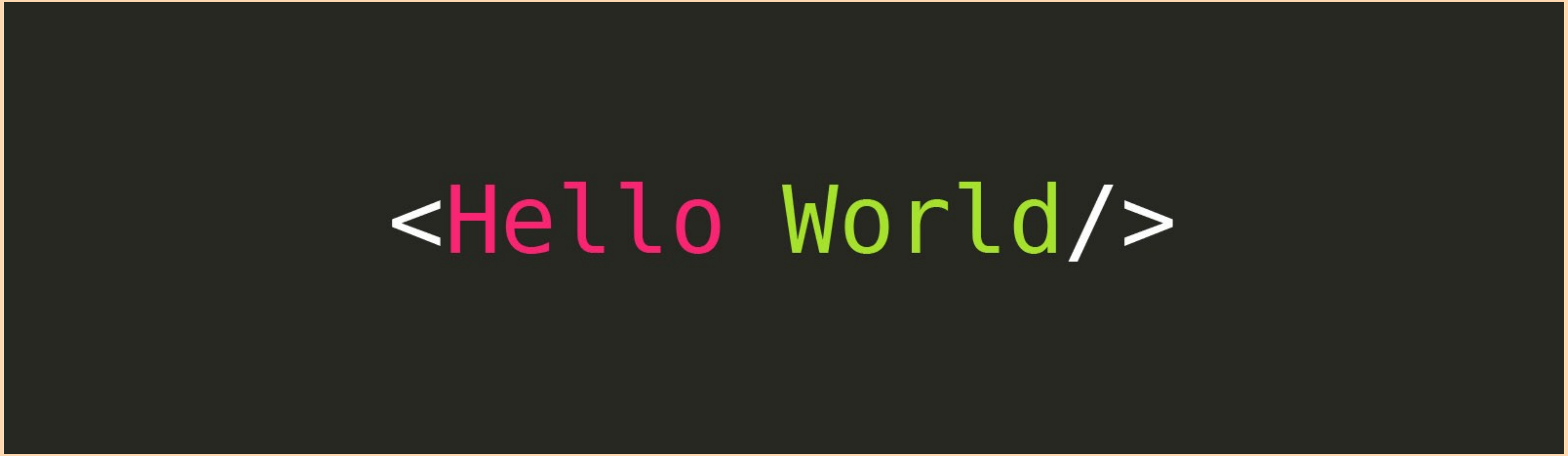
ASK ME ANYTHING

GREAT MINDS
DISCUSS IDEAS

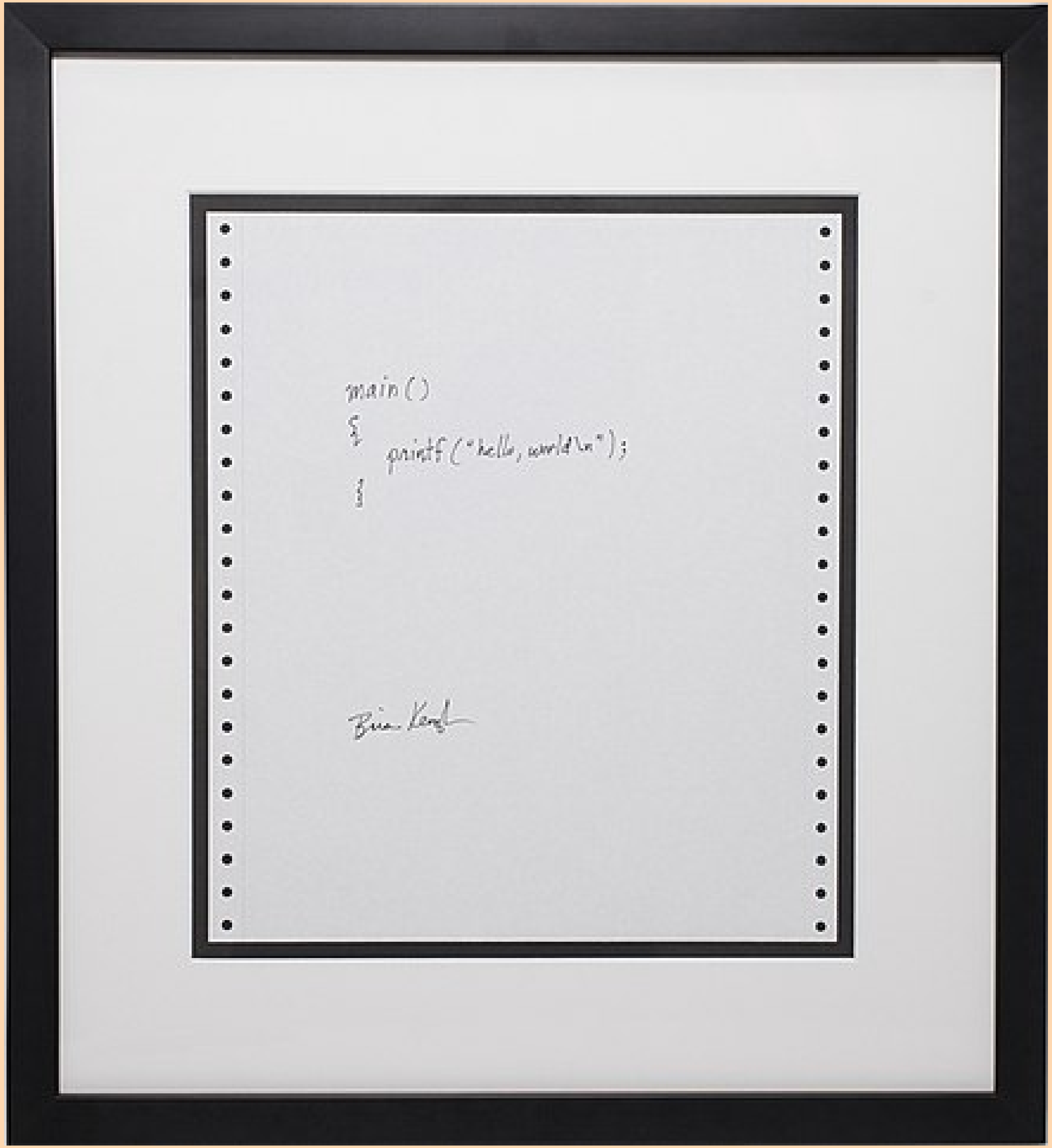


"TALK IS CHEAP. SHOW ME THE CODE."

-LINUS TORVALDS



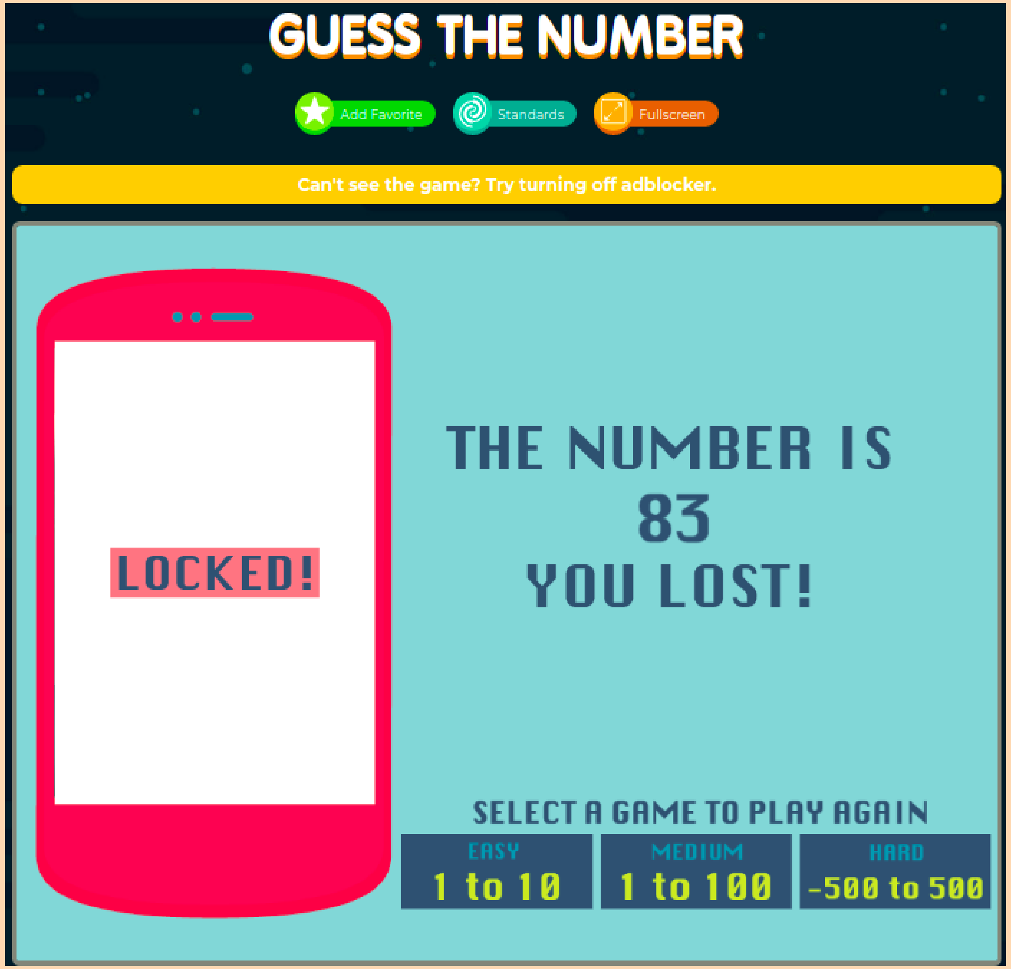
```
<Hello World/>
```



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

Brian Kernighan

Game: Guess the Number



GUESS THE NUMBER

Can't see the game? Try turning off adblocker.

LOCKED!

THE NUMBER IS
83
YOU LOST!

SELECT A GAME TO PLAY AGAIN

Game: Guess the Number

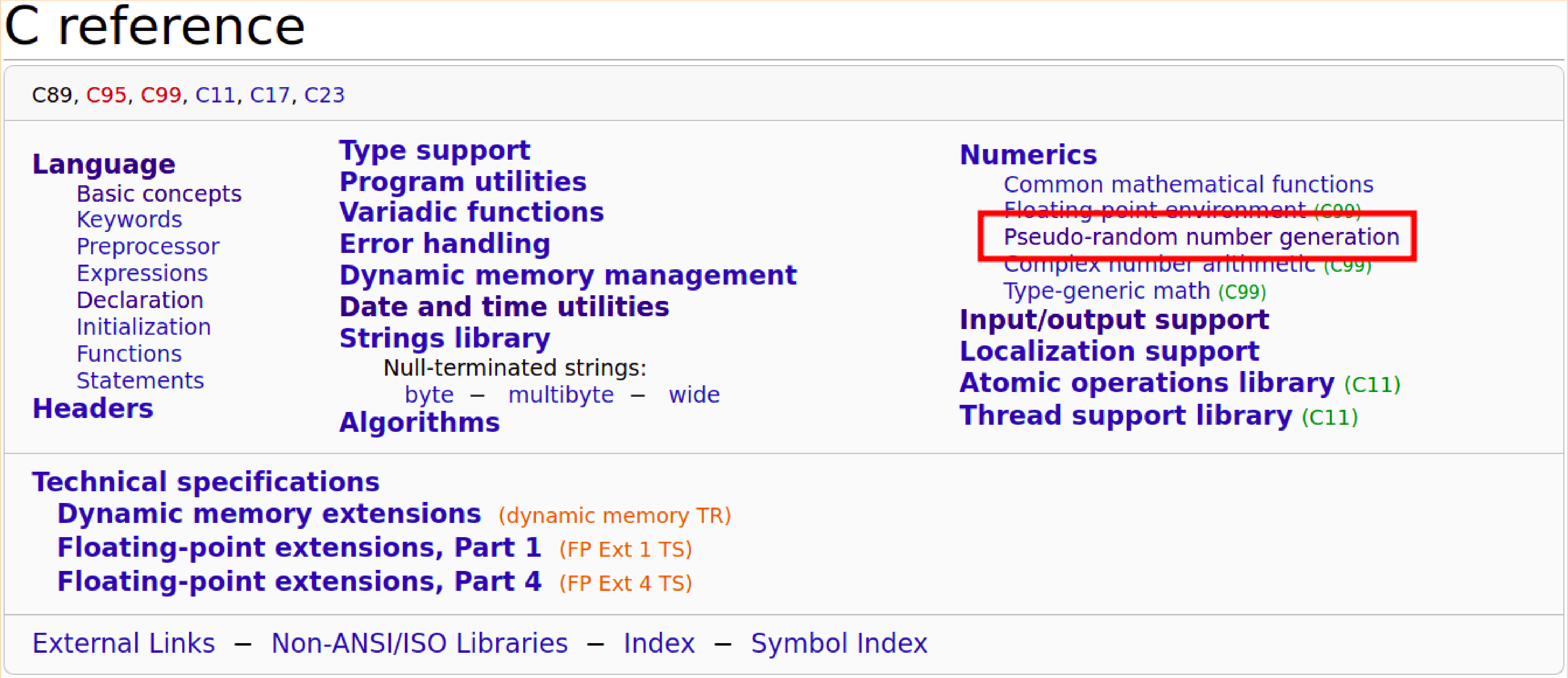
Programming is *NOT* (only) about languages.

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

Game: Guess the Number

Program = Input + Data + Operations + Output

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)

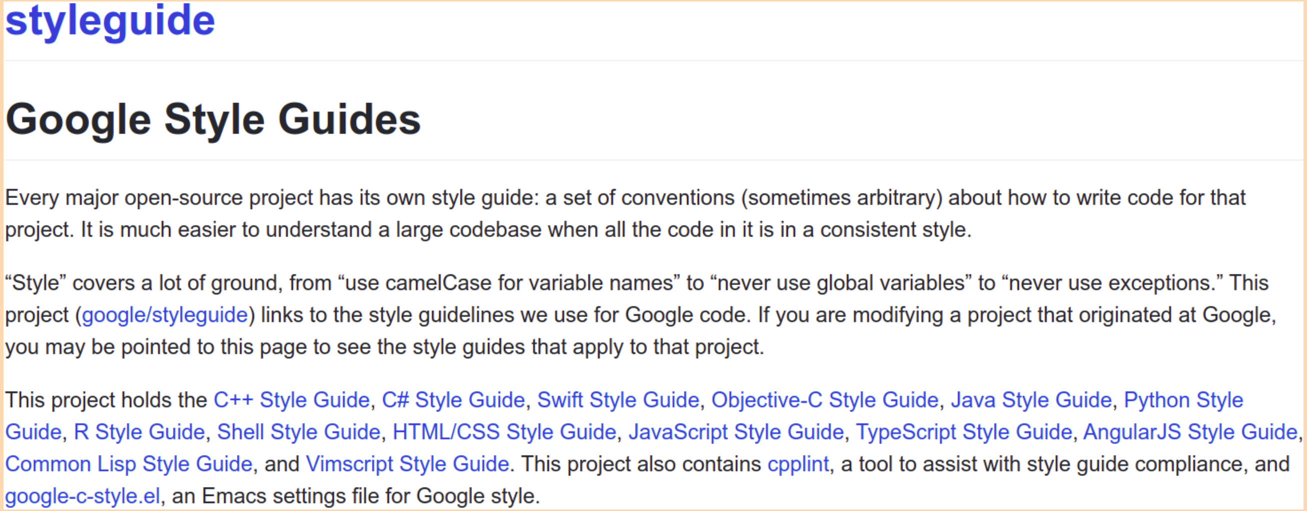
Technical specifications
- **Dynamic memory extensions** (dynamic memory TR)
- **Floating-point extensions, Part 1** (FP Ext 1 TS)
- **Floating-point extensions, Part 4** (FP Ext 4 TS)

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

Code Style

Watch the WAR between Tabs and Spaces

Code Style



styleguide

Google Style Guides

Every major open-source project has its own style guide: a set of conventions (sometimes arbitrary) about how to write code for that project. It is much easier to understand a large codebase when all the code in it is in a consistent style.

“Style” covers a lot of ground, from “use camelCase for variable names” to “never use global variables” to “never use exceptions.” This project (google/styleguide) links to the style guidelines we use for Google code. If you are modifying a project that originated at Google, you may be pointed to this page to see the style guides that apply to that project.

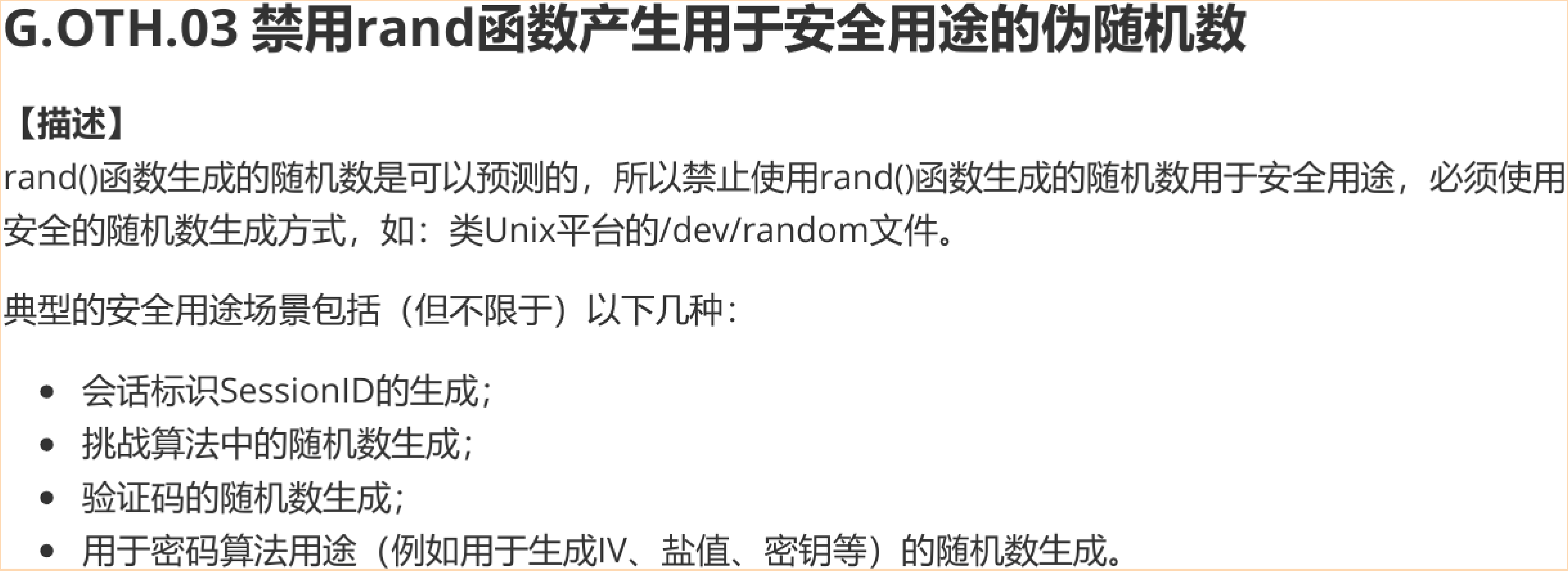
This project holds the C++ Style Guide, C# Style Guide, Swift Style Guide, Objective-C Style Guide, Java Style Guide, Python Style Guide, R Style Guide, Shell Style Guide, HTML/CSS Style Guide, JavaScript Style Guide, TypeScript Style Guide, AngularJS Style Guide, Common Lisp Style Guide, and Vimscript Style Guide. This project also contains cpplint, a tool to assist with style guide compliance, and google-c-style.el, an Emacs settings file for Google style.

C语言编程指南 V1.0

HUAWEI

Code Style @ CLion

Code Style (More Importantly!)



G.OTH.03 禁用rand函数产生用于安全用途的伪随机数

【描述】
rand()函数生成的随机数是可以预测的，所以禁止使用rand()函数生成的随机数用于安全用途，必须使用安全的随机数生成方式，如：类Unix平台的/dev/random文件。

典型的安全用途场景包括（但不限于）以下几种：

- 会话标识SessionID的生成；
- 挑战算法中的随机数生成；
- 验证码的随机数生成；
- 用于密码算法用途（例如用于生成IV、盐值、密钥等）的随机数生成。

Thank You!