

C Programming 2

0 Introduction

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백 윤 철

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- What is C? Why C?
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강의개요



강의, 실습 3시간

월 화



실습

프로젝트 과제



평가

중간 30%

기말 35%

과제 10%, 프로젝트 20%

출석 기타 5% (1/4 결석-> F)

Computing Era

1940

1970

2020

Turing Machine

ABC
ENIAC
EDVAC

DEC
PDP series
minicomputer

IBM
mainframe

Portable
assembly

Sun microsystems
microcomputer

Sun OS
HP-UX
AIX
XENIX

Apple
McIntosh
GUI

iphone
mobile
SAMSUNG

machine language

0, 1



assembly language

Mnemonic instruction
Symbolic address

HLL

Algol
Fortran
Cobol

SW
crisis

C
UNIX

OS

for Dev

90%

assembly language

HW

Sun OS
HP-UX
AIX
XENIX

GNU LINUX

IBM-PC
Personal computer

MS-DOS

Windows

WWW Google

IoT
Cloud
Big Data
AI
Robot

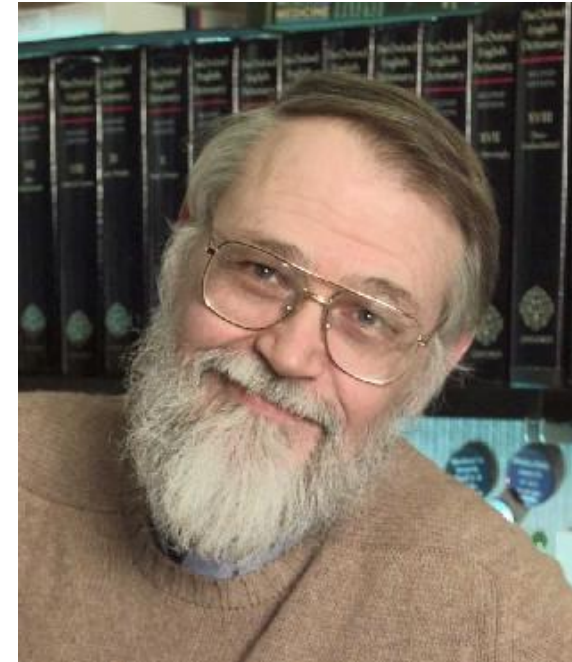
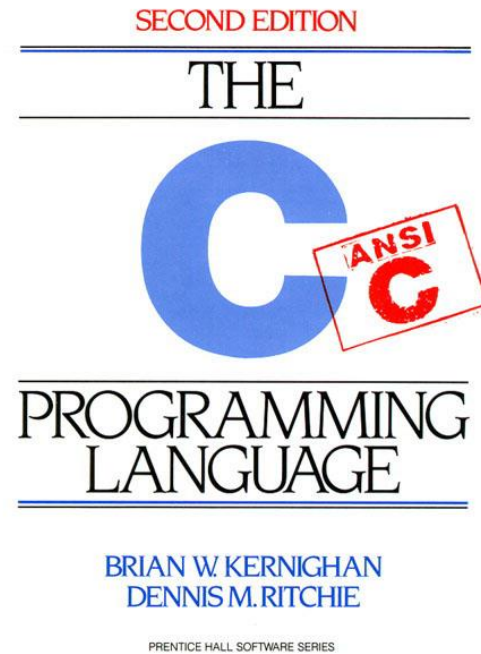
?

What is C and Why?

- http://en.wikipedia.org/wiki/C_programming
 - In [computing](#), C is a general-purpose, [block structured](#), [procedural](#), [imperative](#) computer [programming language](#) developed in [1972](#) by [Dennis Ritchie](#) at the [Bell Telephone Laboratories](#) for use with the [Unix operating system](#).[\[2\]](#)
 - Although C was designed for implementing [system software](#),[\[3\]](#) it is also widely used for developing [application software](#).
 - It is widely used on a great many different [software platforms](#) and [computer architectures](#), and several popular [compilers](#) exist. C has greatly influenced many other popular programming languages, most notably [C++](#), which originally began as an extension to C.

Textbook

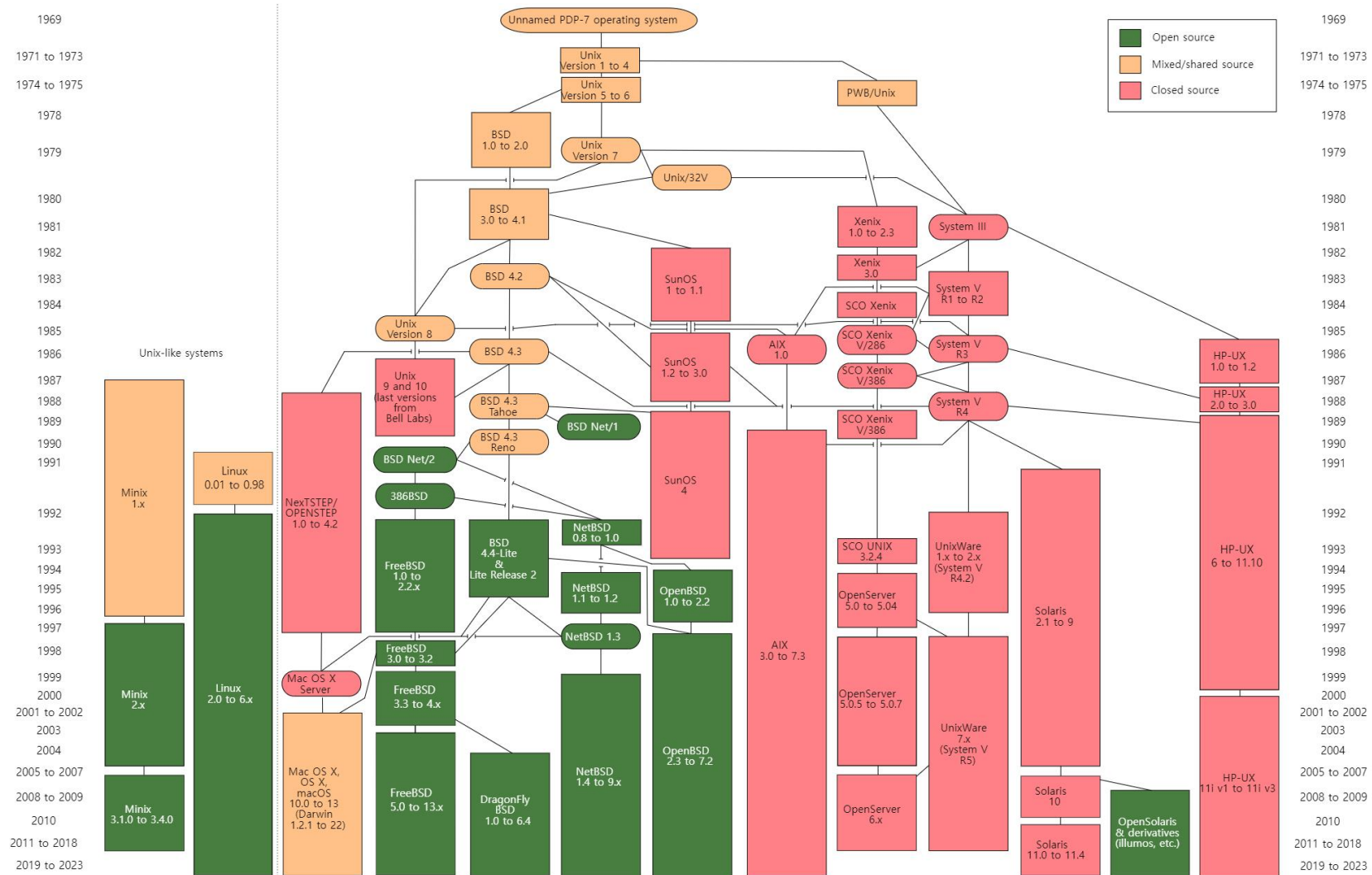
- The C Programming Language, 2nd Ed



UNIX

- Unix ([/ˈjuːnɪks/](#); trademarked as UNIX) is a family of [multitasking](#), [multiuser](#) computer [operating systems](#) that derive from the original [AT&T](#) Unix, development starting in the 1970s at the [Bell Labs](#) research center by [Ken Thompson](#), [Dennis Ritchie](#), and others.

UNIX Family



Linux

- Linux ([/'lɪnəks/](#) ([listen](#)) [LIN-əks](#))[9][10] is a family of [free and open-source software operating systems](#) based on the [Linux kernel](#),[11] an [operating system kernel](#) first released on September 17, 1991 by [Linus Torvalds](#).[\[12\]\[13\]\[14\]](#) Linux is typically [packaged](#) in a [Linux distribution](#) (or distro for short).
- Linux is one of the most prominent examples of free and open-source [software](#) collaboration. The [source code](#) may be used, modified and distributed—commercially or non-commercially—by anyone under the terms of its respective licenses, such as the [GNU General Public License](#).

실습



C Programming 1

Windows 기반 환경



C Programming 2

Linux

- VirtualBox on Windows
- Linux on VirtualBox

15주 구성

- Install VB, Ubuntu
- Basic Linux command, gcc, vi
- C Programming 1 Review
- Pointers and Arrays
- Function and Structures
- UNIX System Interface
- Dev Utilities (Make, GDB)
- Libraries (C, Ncurses)
- Lab, Exam, Project

Q & A

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