

15CSE102

Computer Programming

Course
Administrivia

Theory

Evaluation Pattern

| | |
|----------------------------|------------------------------------|
| First Assessment: | 15 marks |
| Second Assessment | 15 marks |
| Continuous Assessment | 20 marks (3 quizzes + 3 tutorials) |
| Internal Assessment | 50 marks |
| End Semester | 50 marks |
| Total | 100 marks |

15CSE180

(15CSE180 Computer Programming Lab) Evaluation Pattern

| Continuous Assessment | 80 Marks |
|------------------------------|------------------|
| Evaluation Lab (3 Nos) | - 60 Marks |
| + 1 Project Work | |
| P Test 1 | - 10 Marks |
| P Test 2 | - 10 Marks |
| End Semester | 20 Marks |
| Total | 100 Marks |

TEXT BOOK:

1. Behrouz A. Forouzan and Richard F. Gilberg, “Computer Science: A Structured Programming Approach Using C”, Third Edition, Cengage Learning, 2006.

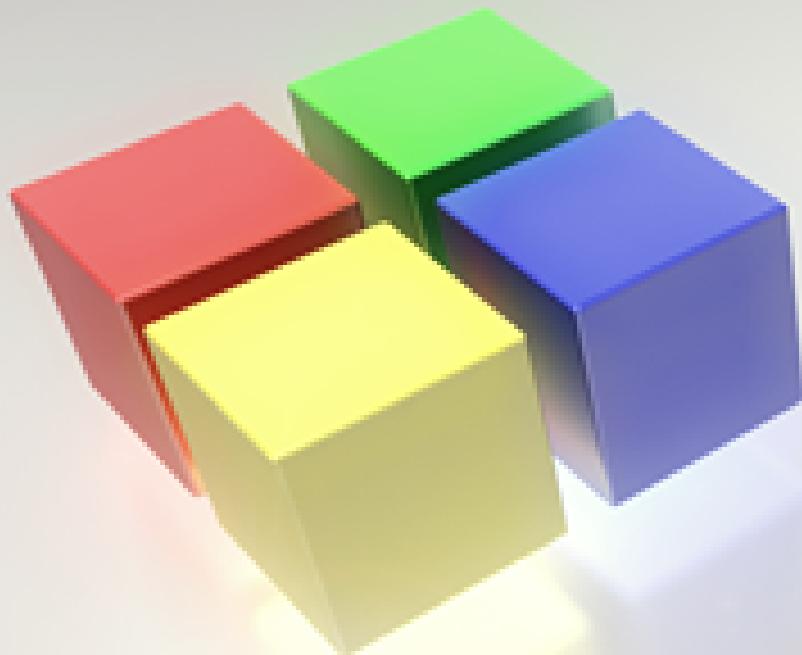
REFERENCES:

1. Brian W. Kernighan and Dennis M. Ritchie, “The C Programming Language”, Second Edition, Prentice Hall, 1988.
2. Eric Roberts, “The Art and science of C”, Addison Wesley Publishing House, 1995.
3. Jeri RHanly and Elliot BKoffman, “Problem solving and program design in C”, Fifth Edition, Pearson Education of India, 2008.

Syllabi, Course/Lab Plans
will be uploaded in
AUMS/Intranet

Tools of the Trade

But if you prefer an IDE



Code::Blocks

The open source, cross-platform IDE

<http://www.codeblocks.org>

BYOD

Strongly encouraged & recommended



15CSE102

Computer Programming

Introduction

C
PROGRAMMING
LANGUAGE
CREATOR

DENNIS RITCHIE

1941 - 2011



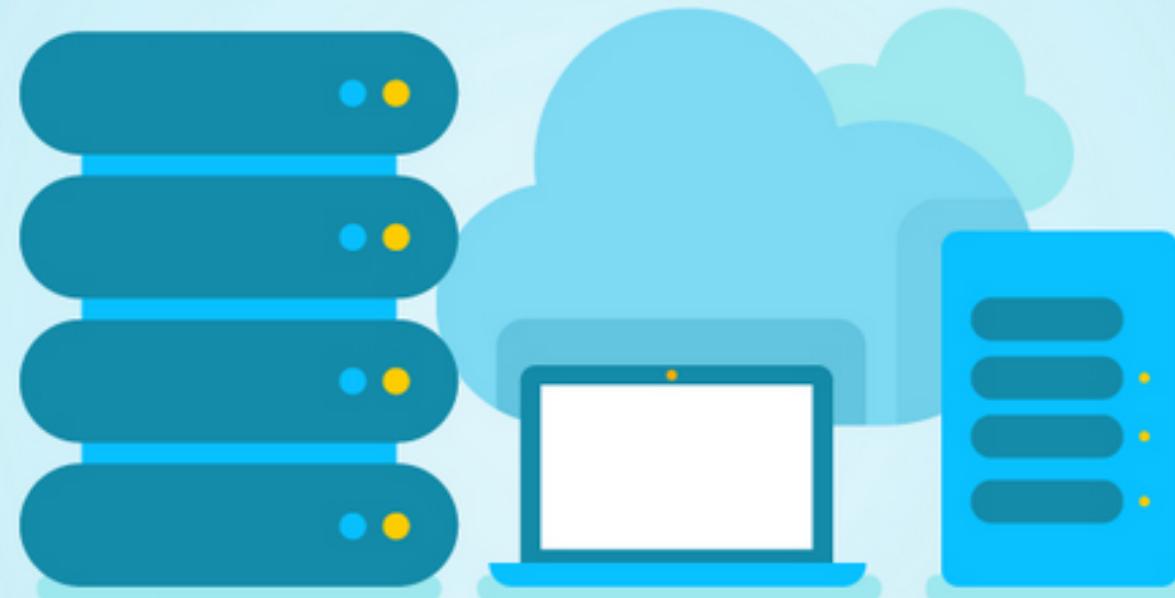
Why C?

OS Kernels
Written in C



Why C?

Databases
Powered by C



ORACLE

MySQL



toptal

Credits: www.toptal.com

Why C?

**Many Embedded Systems
Run on C**



C – Behind Many Things



Why C?

Procedural programming paradigm

Close to hardware

Portability and efficiency

Memory manipulation; Small memory footprint

TIOBE Index

| Dec 2016 | Dec 2015 | Change | Programming Language | Ratings | Change |
|----------|----------|--------|----------------------|---------|--------|
| 1 | 1 | | Java | 17.856% | -3.12% |
| 2 | 2 | | C | 8.726% | -7.73% |
| 3 | 3 | | C++ | 5.335% | -0.61% |
| 4 | 4 | | Python | 4.239% | -0.19% |
| 5 | 7 | ▲ | Visual Basic .NET | 3.302% | +0.91% |
| 6 | 5 | ▼ | C# | 3.171% | -0.94% |
| 7 | 6 | ▼ | PHP | 2.919% | +0.13% |
| 8 | 8 | | JavaScript | 2.862% | +0.50% |
| 9 | 11 | ▲ | Assembly language | 2.539% | +0.61% |
| 10 | 9 | ▼ | Perl | 2.338% | +0.13% |

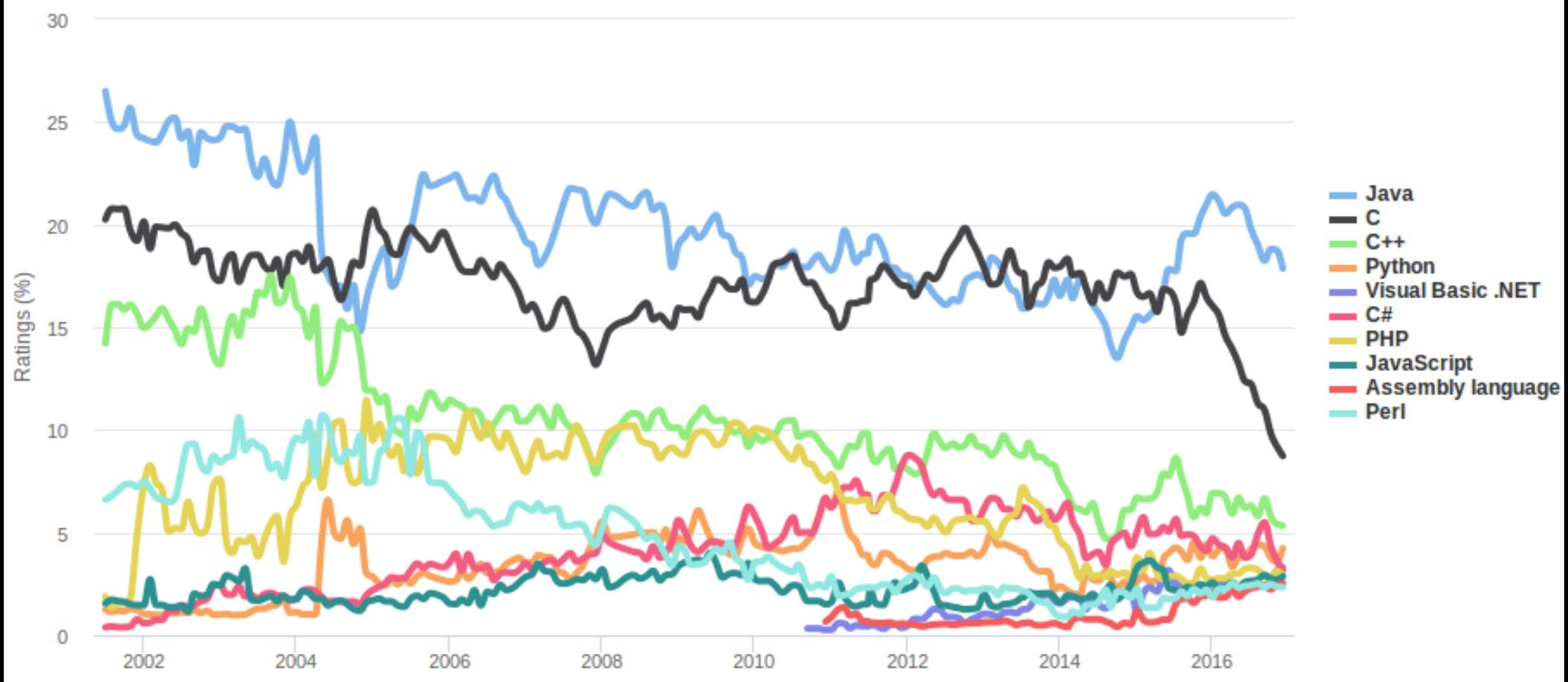
TIOBE Index

| Programming Language | 2016 | 2011 | 2006 | 2001 | 1996 | 1991 | 1986 |
|----------------------|------|------|------|------|------|------|------|
| Java | 1 | 1 | 1 | 2 | 14 | - | - |
| C | 2 | 2 | 2 | 1 | 1 | 1 | 1 |
| C++ | 3 | 3 | 3 | 3 | 2 | 2 | 5 |
| C# | 4 | 4 | 6 | 9 | - | - | - |
| Python | 5 | 7 | 7 | 18 | 26 | - | - |
| PHP | 6 | 5 | 4 | 8 | - | - | - |
| JavaScript | 7 | 9 | 9 | 7 | 19 | - | - |
| Visual Basic .NET | 8 | 25 | - | - | - | - | - |
| Perl | 9 | 8 | 5 | 4 | 3 | - | - |
| Assembly language | 10 | - | - | - | - | - | - |

TIOBE Index

TIOBE Programming Community Index

Source: www.tiobe.com



15CSE102

Computer Programming

(Next Topic)

Hello World!!