

Data Structures



Introduction to Programming

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Last Class Summary

- **Class Timings**
- **Mark Split-Up**
- **Pre-requisites**
- **Syllabus**
- **Bloom's Taxonomy**
- **Course Outcomes**
- **Fundamentals**
- **General Parts of a Computer**

Introduction to C

Introduction to C

- **C => Programming Language**

Introduction to C

- **C => Programming Language**
 - **Program?**
 - **Language?**

Introduction to C

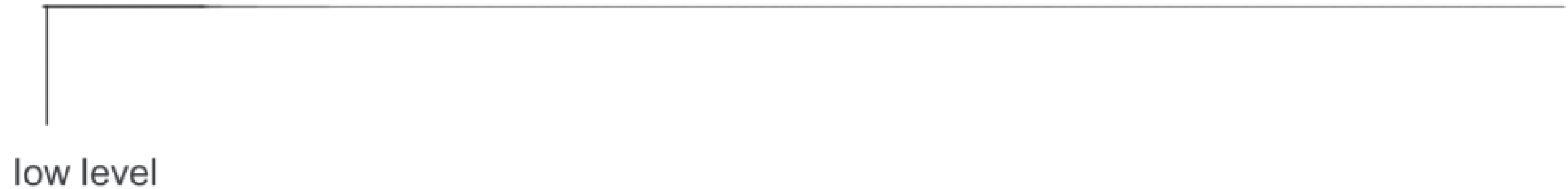
- **C => Programming Language**
 - **Program?**
 - **A meaningful set of syntactically correct statements/instructions that solves a computational problem.**
 - **Language?**

Introduction to C

- **C => Programming Language**
 - **Program?**
 - **A meaningful set of syntactically correct statements/instructions that solves a computational problem.**
 - **Language?**
 - **A grammatical set of meaningful sentences used for communication.**

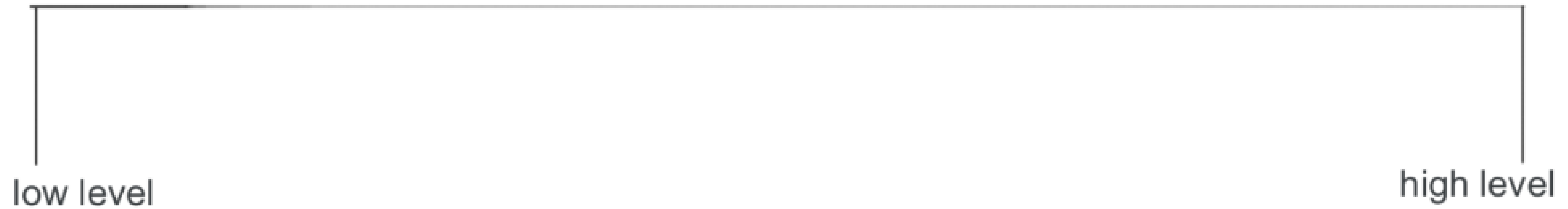
Language

- **Language Line**



Language

- **Language Line**



Language

- **Language Line**



Language

- **Language Line**

Unary

Language - 1

0 - 1

1 - 11

2 - 111



Unary	Binary
Language - 1	Language -
0 - 1	0 and 1
1 - 11	Machine
2 - 111	Language



Unary	Binary
Language - 1	Language -
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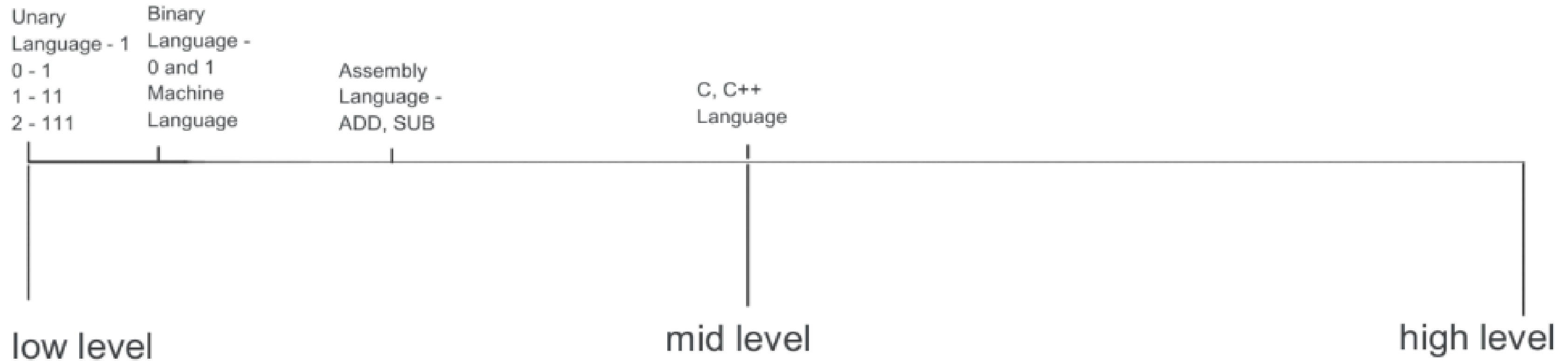
Language

- **Language Line**



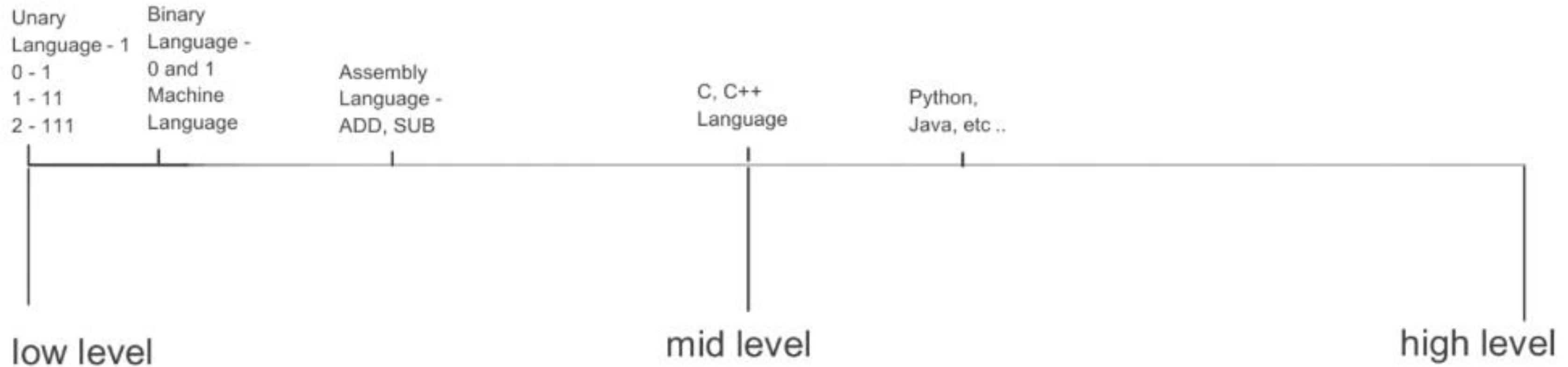
Language

- **Language Line**



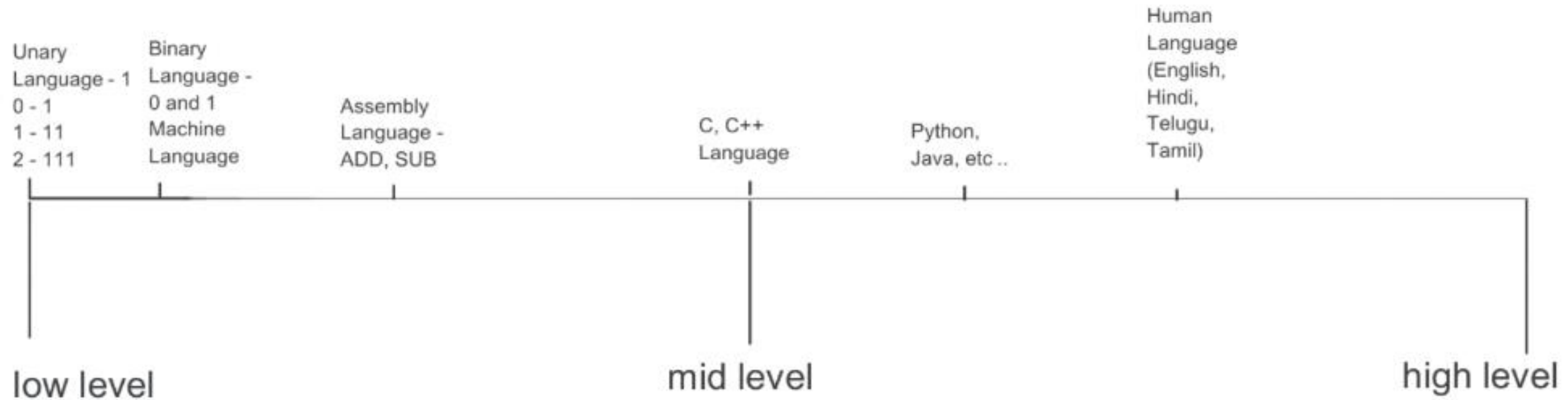
Language

- **Language Line**



Language

- **Language Line**



Language

	English	C
Alphabet	A-Z, a-z	A-Z, a-z
Numbers	0-9	0-9, 0 and 1, 0-7, 0-F
Words	Words	Tokens
Sentences	Grammar + Words = Sentences	Syntax + Tokens = Statements
Paragraph	Paragraph	Block
Chapter/Book	Chapter/Book	Program
Library	Library	Library

Questions?

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Today's Course Outcomes

- **CO1 – Implement C programs from algorithms and flowcharts with error handling. – K3**
- **CO2 – Implement programming fundamentals, decision and looping statements – K3**
- **CO3 – Implement C programs with pointers, arrays, and strings – K3**
- **CO4 – Implement C programs with structures, union, file-handling concepts, and additional features – K3**
- **CO5 – Analyze, breakdown, and solve large computational problems using functions – K4**

Summary

- **Introduction to C**
- **Language**
- **Today's Course Outcome**

- **Kernighan, B.W and Ritchie, D. M, “The C Programming language”, 2nd edition, Pearson Education, 2006**

THANK YOU

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