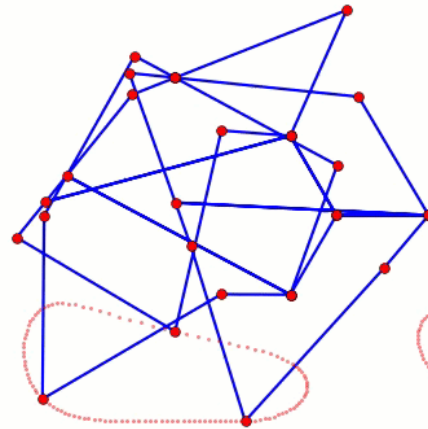
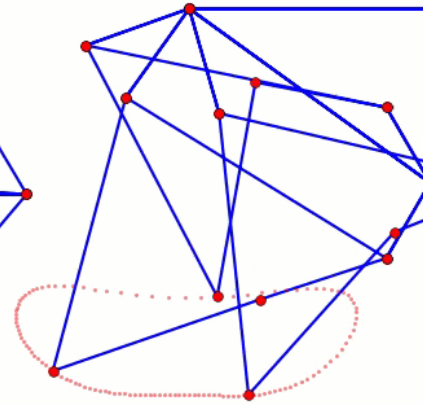


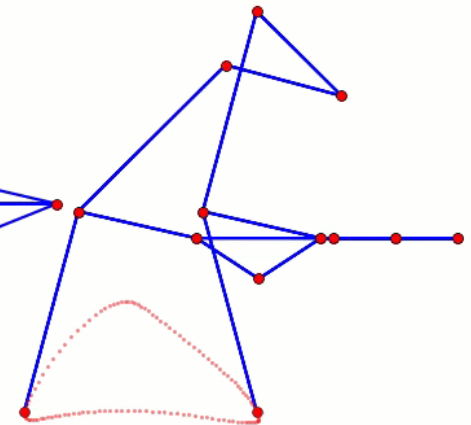
Strandbeest



TrotBot



Strider



Klann

"An algorithm must be seen to be believed"

-DONALD KNUTH

father of the analysis of algorithms



CSE- 207

Algorithms

Lecture: 0

Fahad Ahmed

Lecturer, Dept. of CSE

E-mail: fahadahmed@uap-bd.edu

Pre-requisite

Pre-requisite Courses :

CSE 103: Structured Programming

CSE 205: Data Structures



Course Synopsis

```

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    ZZUFA@FI.^
    ;BRHv n$U'-
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```

- ❖ Complexity analysis
- ❖ Divide and Conquer
- ❖ Greedy algorithm
- ❖ Dynamic Programming
- ❖ Backtracking
- ❖ Graph and Tree related algorithms
- ❖ NP-Completeness

CO-PO

CO No.	CO Statements: Upon successful completion of the course, students should be able to:	Corresponding POs
CO1	Explain terms related to important algorithm analysis, design techniques, and basic algorithms.	1-Engineering Knowledge
CO2	Apply techniques and appropriate data structures to design and implement algorithms to solve a practical problem.	3-Design/ development of solutions
CO3	Analyze the performance / resource requirements of various algorithms.	4- Investigation
CO4	Develop algorithmic solutions to real-life problems.	3-Design/ development of solutions

Weighting COs with Assessment methods

Assessment Type		Marks Distribution (%)	CO1	CO2	CO3	CO4
			PO1	PO3	PO4	PO3
Final Exam (50%)		50	10	30		10
Mid Term (20%)		20	6.67	6.66	6.66	
Assessment (30%)	Assignment	10		5		5
	Quiz	20		10	5	5
Total		100%	11.67	48.33	30	10

Weighting COs with Assessment methods

** Assignment / Home task/Presentation : Maximum-04

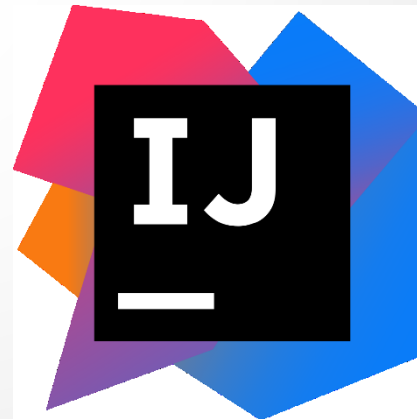
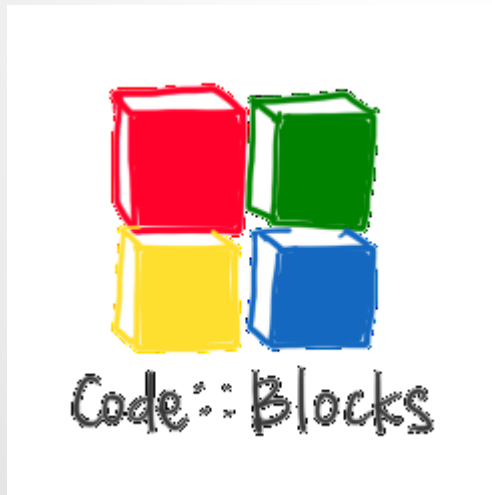
** Class test : At least 4 (Count 3's average , CT-01,03 (compulsory)**)

Class test / Quiz**	
Class test -01	20
Class test -03	20
Class test - 2 or 4 (best one)	20
Average	20

** Some modifications will come to select the Quiz

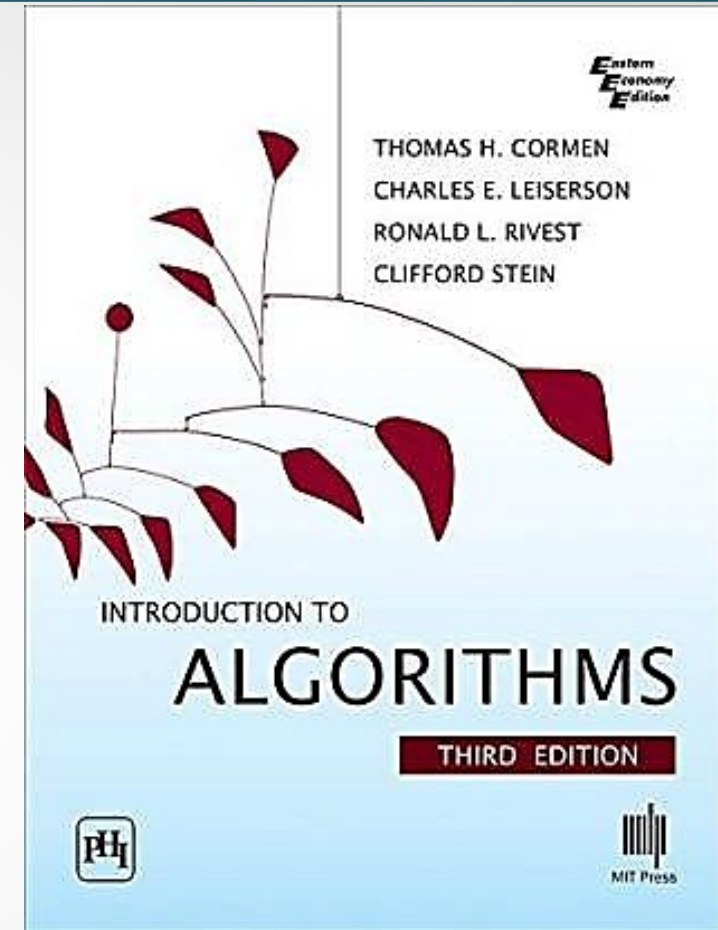
Preferred Language: C, C++, Java

**IDE: Codeblocks 13.12(C,C++)
IntelliJ IDEA (Java)**



References

1. **Introduction to Algorithms Book**
by Thomas H. Cormen Charles E. Leiserson Ronald L. Rivest and Clifford Stein
2. <https://www.geeksforgeeks.org/fundamentals-of-algorithms/>





Thanks to All