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References: Data structures and algorithms in java-**Goodrich et al.** (can be downloaded from the webpage).

Projects and Homeworks will be uploaded on the LMS (lms.uok.ac.ir) every Thursday.

Evaluation: **25%** Midtern+**30%** final exam+**20%** projects+**25%** Homework.

Session No.	week	Topic
Session 1	1	Introduction
Session 2	1	Introduction to Arrays
Session 3	1	Arrays with multiple dimension
Session 4	2	Solving Exercises and sample problems
Session 5	2	How to save arrays in memory
Session 6	2	How to search in arrays
Session 7	3	Solving Exercises and sample problems
Session 8	3	Sum, multiplications, and determinant of matrixes
Session 9	3	Programming the before algorithms
Session 10	4	Solving Exercises and sample problems
Session 11	4	Representing Multi-Sentence phrases
Session 12	4	ADT (Abstract Data Type)
Session 13	5	Solving Exercises and sample problems
Session 14	5	Stack
Session 15	5	Implementing Stacks and ADT
Session 16	6	Solving Exercises and sample problems
Session 17	6	Using Stacks for solving computational phrases
Session 18	6	Using Stacks for solving computational phrases
Session 19	7	Solving Exercises and sample problems
Session 20	7	Queue concept
Session 21	7	Linked lists
Session 22	8	Solving Exercises and sample problems
Session 23	8	Implementing Linked list and Queue
Session 24	8	Recursive function+Implementation
Session 25	9	Solving Exercises and sample problems
Session 26	9	Complexity of algorithms-concept
Session 27	9	Big-O, Omega, and Teta computation
Session 28	10	Solving Exercises and sample problems
Session 29	10	Implementing search algorithms
Session 30	10	Sorting algorithms
Session 31	11	Solving Exercises and sample problems
Session 32	11	Introduction to graphs
Session 33	11	Graph navigation
Session 34	12	Solving Exercises and sample problems
Session 35	12	Tree
Session 36	12	Tree Navigation
Session 37	13	Solving Exercises and sample problems
Session 38	13	Binary search tree
Session 39	13	Implementation
Session 40	14	Solving Exercises and sample problems
Session 41	14	Heap
Session 42	14	Heap
Session 43	15	Solving Exercises and sample problems
Session 44	15	Solving Exercises and sample problems
Session 45	15	Overview