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|  | طريقة التعلم | اسم الوحدة/او الموضوع | مخرجات التعلم المطلوبة | الساعات | الاسبوع |
|  | Theory+ LAB | Introduction - **Types of Data types, type of data structures** |  | 6 | 1 |
|  | Theory+ LAB | Arrays DS: definition, features, logic, physical structure, access equations of one dimensional array. |  | 6 | 2 |
|  | Theory+ LAB | Arrays DS: logic, physical structure, access equations of two dimensional arrays. |  | 6 | 3 |
|  | Theory+ LAB | Arrays DS: logic, physical structure, access equation of three and multi-dimensional arrays and triangle arrays. |  | 6 | 4 |
|  | Theory+ LAB | Strings DS: definition, basic representations in memory, create String object |  | 6 | 5 |
|  | Theory+ LAB | Linked Lists DS: definition, advantage and disadvantage of arrays and linked lists, basic operations of linked lists, types of linked lists. |  | 6 | 6 |
|  | Theory+ LAB | **Exam** |  | 6 | 7 |
|  | Theory+ LAB | Implementation of linked lists |  | 6 | 8 |
|  | Theory+ LAB | Stack DS: definition, features, implementation using linked lists and Arrays |  | 6 | 9 |
|  | Theory+ LAB | Stack DS: Application-recursion |  | 6 | 10 |
|  | Theory+ LAB | Stack DS: Application- Expression Conversion |  | 6 | 11 |
|  | Theory+ LAB | Stack DS: Application- evaluating expressions |  | 6 | 12 |
|  | Theory+ LAB | Queue DS: definition, features, implementation using linked lists |  | 6 | 13 |
|  | Theory+ LAB | Queue DS: definition, features, implementation using Arrays |  | 6 | 14 |
|  | Theory+ LAB | Queue DS: types of queues |  | 6 | 15 |
|  | Theory+ LAB | **Preparatory week before the final Exam** |  | 6 | 16 |