

CE205 Data Structures

Week-2

Linked Lists and Related Algorithms Arrays and Matrices

Download [DOC](#), [SLIDE](#), [PPTX](#)

<iframe width=700, height=500 frameBorder=0 src="../ce205-week-2-linkedlist.md_slide.html"> </iframe>

Resources

[WilliamFiset - YouTube](#)

[GitHub - williamfiset/Algorithms: A collection of algorithms and data structures](#)

[Data Structures Tutorials - Introduction to Algorithms](#)

[Data Structure and Types](#)

[Array Data Structure - GeeksforGeeks](#)

Single Linked List

1. Data Structures Tutorials - Single Linked List with an example
2. <https://visualgo.net/en/list>

Circular Linked List

1. [Data Structures Tutorials - Circular Linked List with an example | Implementation](#)
2. [Circular Linked List | Set 1 \(Introduction and Applications\) - GeeksforGeeks](#)
3. [Circular Linked List | Set 2 \(Traversal\) - GeeksforGeeks](#)

Double Linked List

1. [Data Structures Tutorials - Double Linked List with an example program](#)
2. [Doubly Linked List | Set 1 \(Introduction and Insertion\) - GeeksforGeeks](#)
3. [Linked List \(Single, Doubly\), Stack, Queue, Deque - VisuAlgo](#)

XOR Linked List

1. [XOR linked list - Wikipedia](#)
2. [XOR Linked List - A Memory Efficient Doubly Linked List | Set 1 - GeeksforGeeks](#)
3. [XOR Linked List – A Memory Efficient Doubly Linked List | Set 2 - GeeksforGeeks](#)

Skip List

1. [Skip list - Wikipedia](#)
2. [Skip List | Set 1 \(Introduction\) - GeeksforGeeks](#)
3. [Skip List | Set 2 \(Insertion\) - GeeksforGeeks](#)
4. [Skip List | Set 3 \(Searching and Deletion\) - GeeksforGeeks](#)

Strand Sort

1. Strand Sort - [GeeksforGeeks](#)

Arrays

1. [Array Data Structure - GeeksforGeeks](#)
2. [Data structures Tutorials - Arrays](#)
3. [Circular array - GeeksforGeeks](#)

Array Rotations

1. [Program for array rotation - GeeksforGeeks](#)

Arrangement Rearrangement

1. [Array Rearrangement - GeeksforGeeks](#)

Searching and Sorting

1. [Difference between Searching and Sorting Algorithms - GeeksforGeeks](#)

Optimization Problems

Matrix

1. [Matrix Archives - GeeksforGeeks](#)

Sparse Matrix

1. Data Structures Tutorials - Sparse Matrix with an example