What is the difference between a linked list and a dynamic array?

A linked list is a data structure consisted of nodes, where each contains data and pointers to the nest node in sequence. This can lead to more memory overhead due to the storage of pointers. A Linked List is better for frequent insertions and deletions, but slow for random access.

A dynamic array is a continuous block of memory that can grow or shrink in size as needed. Dynamic array are better for random access and more memory efficient storage, but slower for insertions and deletions in the middle. However, there can be some wasted space if the array is not fully utilized.

What is one of the strengths of a linked list?

**No need to shift elements:** When you insert or delete an element in an array, you often need to shift the positions of other elements to maintain the contiguous order. This can be time-consuming, especially for large arrays.

What is one of the drawbacks of a linked list?

One notable drawback of a linked list is that it has poor memory locality compared to arrays. This is because linked lists store elements at non-contiguous memory locations. As a result, accessing elements sequentially in a linked list can be slower than in an array, where elements are stored contiguously and can be accessed more efficiently.

During this time together, you should share strategy, technique, and examples to help each other learn the material.

1- Be rested.

2- Set aside time for relaxation.

3- Look for quiet and peaceful places, avoid distractions such as social networks.

4- Make notes, summaries, comments. Mind maps are very useful.

5- Practice, practice, and practice.

6- Use research resources to delve deeper into the topic being studied. Ex (Copilot, Gemini...).

7- There are good materials on YouTube that you can use to gain basic knowledge.