**Patrick Star DSA Program**

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===== Data Structures =====

Choose:

1. Array
2. Queue
3. Stack
4. Linked List
5. Binary Tree
6. Graph Theory

Enter Choice:

(Under Data Structures)

If user chooses ‘**Array’**:

* Create array
* Show original
* Show shorted
* Search element
* Go back

If user chooses ‘**Queue’**:

* Create queue
* Check if full
* Check if empty
* Enqueue/insert
* Dequeue/remove
* Get front/first element
* Get rear/last element
* Go back

If user chooses ‘**Stack**’:

* Push
* Pop
* Peek
* Check if empty
* Display
* Go back

If user chooses ‘**Linked List**’:

* Append node
* Delete node
* Delete node at a given position
* Display
* Go back

If user chooses ‘**Binary Tree**’:

* Display tree
* In order traversal
* Pre order traversal
* Post order traversal
* Go back

If user chooses ‘**Graph Theory**’:

* Create graph
* Show adjacency list
* Show adjacency matrix
* Perform Depth-First Search (DFS)
* Perform Breadth-First Search (BFS)
* Go back