## VERİ YAPILARI TERMİNOLOJİ

**Data Structures:** A data structure is an arrangement of data in a computer's memory (or sometimes on

a disk)

Array: The array is the most commonly used data storage structure; it's built into most

programming languages.

**Stack:** A **stack** allows access to only one data item: the last item inserted.

**Queue:** In computer science a **queue** is a data structure that is somewhat like a stack, except

that in a queue the first item inserted is the first to be removed (First-In-First-Out, FIFO), while in a stack, as we've seen, the last item inserted is the first to be removed (LIFO).

Queue -> Enqueue: The enqueue method adds element into the tail of the queue.

Queue -> Dequeue: The dequeue method removes an element from the head of the queue and returns

the removed element.

**Queue**  $\rightarrow$  **Front**: The **Front** is used to reference the first or the oldest element of the queue container.

**Queue**  $\rightarrow$  **Rear**: The Rear is used to reference the last or the newest element of the queue container.

Queue -> Priority Queue: A priority queue is a special type of queue in which each element is associated with a

priority value.

**List** → head: The first node of a linked list usually is called the head of the list.

**List → Tail:** The last node of a linked list usually is called the **tail** of the list.

List → Doubly link list: Doubly Linked List is a variation of Linked list in which navigation is possible in both

ways, either forward and backward easily as compared to Single Linked List.

**List → Circular link lists:** Circular linked list is a linked list where all nodes are connected to form a circle.

**Binary tree** → **Root**: The node at the top of the tree is called the **root**.

Binary tree → Parent: Any node (except the root) has exactly one edge running upward to another node. The

node above it is called the **parent** of the node.

Binary tree → Child: Any node may have one or more lines running downward to other nodes. These nodes

below a given node are called its child.

Binary tree → Leaf: Node with no children is called leaf, or external node.

successor node:

Binary

tree → inorder

In Binary Search Tree, inorder successor node can also be defined as the node with

the smallest key greater than the key of the current node.

Binary tree → height: The height of a binary tree is the height of the root node in the whole binary tree.

Binary tree  $\rightarrow$  depth: The depth of a node in a binary tree is the total number of edges from the root node

to the target node. Similarly, the depth of a binary tree is the total number of edges

from the root node to the most distant leaf node.

**Binary tree** → **ancestor:** An **ancestor** is a node that is present in the upper layer of a given node.

Stack → Push: The push(Object element) method adds the specified element to the stack

**Stack**  $\rightarrow$  **Pop:** The **pop** method removes the top element from the stack and returns it.

Stack → Peek: The peek() method retrieves the element at the top of the stack without removing it.

**Graph**→ vertex: "Vertex" is a synonym for a node of a graph, i.e., one of the points on which the graph

is defined and which may be connected by graph edges.

Graph → edge: An edge (or link) of a network (or graph) is one of the connections between the nodes

(or vertices) of the network.