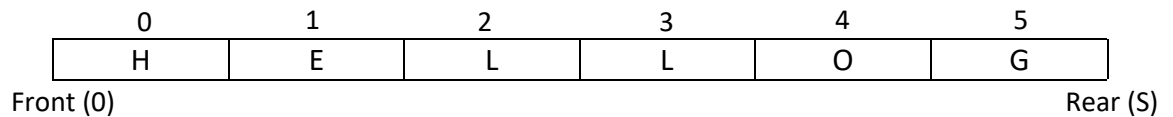


# ALGO Tutorial 03

## 1. What is a queue?

- A Queue is defined as a linear data structure that is open at both ends and the operations are performed in First in First Out (FIFO) order.

## 2. Draw the logical representation of the Queue?



## 3. What are the features of a queue?

- Enqueue, Dequeue, Front, Rear, FIFO Order, Fixed Size or Dynamic Size, Empty and Full States, Peek, Usage

## 4. What is FIFO? Describe.

- FIFO stands for First-In-First-Out, and it is a principle or order of processing elements in a data structure. In a FIFO structure, the element that enters the structure first is the first one to be processed or removed.

## 5. There are three instances in which the queue could be empty. Mention those?

- Front is at -1.
- Front becomes greater than rear.
- Front is equal to rear.

## 6. Give examples of queues in real life.

- Supermarket Checkout
- Ticket Counters
- ATM Machines
- Bus Stops
- Call Centers