

What is Queue?

- A linear data structure that follows FIFO (First In, First Out) principle.
- Element inserted first will be removed first.

Why we use Queue?

- To manage tasks in order.
- When order of processing is important.
- Useful in scheduling, buffering, and handling requests.

Real life examples

- People standing in a line at a ticket counter (first person served first).
- Printer queue (first document sent will be printed first).
- CPU task scheduling (first process arrives, executed first).
- Call center support system (first call received, answered first).

Queue Implementation?

- Using Array (fixed size, simple but limited).
- Using Linked List (dynamic size, more flexible).