QUEUES : Guided Exercises

1. Implement an integer queue using an array File(-1 : 100), where File(-1) is used to indicate the head, File(0) to indicate the tail and File(1:100) contains the elements of the queue. How to initialize the empty queue? Translate the operations of the abstract machine defined on the queues.

2. How to implement a queue where each element contains a variable number of integers.

3. A priority queue is a queue in which the dequeue operation retrieves the highest priority element. Define an abstract machine on this type of queue and implement it using first an array and then a list.