Exercise 4: Queue data structure with linked list

a. Pseudo-code:

```
Node:
        data
        nextNode
Queue:
        head
        tail

function initQueue:
        head = nullNode:
        data
        nextNode

Queue:
        head
        tail

function initQueue():
        head = null
        tail = null

function enqueue(data):
        newNode = new Node()
        newNode.data = data
        newNode.nextNode = NULL

        if tail is NULL:
        head = tail = newNode
        else:
        tail.nextNode = newNode
        tail = newNode

function dequeue():
        if head is not NULL:
        head = head.nextNode
        if head is NULL:
                tail = NULL

function front():
        if head is NULL:
        return "empty"
        return head.data

function empty():
        return head is NULL
```

b. Complexity: $O(1)$ *each operator*