Question (1)

1(a)
s.push ("a") → [a
s.push ("b") → [a,b
s.pop() → [a
s.push ("c") → [a,c
s.pop () → [a
s.pop() → [

1(b)
s.push("a") → "a" → [/]
s.push ("a") → "b" → "a" → [/]
s.pop () → "a" → [/]
s.push ("c") → "c" → "a" → [/]
s.pop() → "a" → [/]
s.pop() → [/] — head = null
  — linkedList empty.

Question 2

2(a)
q.enqueue ("a") → < "a" >
q.enqueue ("b") → < "a", "b" >
q.dequeue () → < "b" >
q.enqueue ("c") → < "b", "c" >
q.dequeue () → < "c" >
q.dequeue () → < > — empty queue.
    head == null
    tail == null.

2(b)
q.enqueue ("a") → a → [/]
q.enqueue ("b") → a → b → [/]
q.dequeue () → b → [/]
q.enqueue ("c") → b → c → [/]
q.dequeue () → c → [/]
q.dequeue () → [/]