

**CS3353: Data Structures and Algorithm Analysis I  
Fall 2022**

**Review Quiz #4**

- Name only: \_\_\_\_\_
- Release date: Sep 21, 2022 (Wednesday)
- Total 5 pts

1. Stack is a [                    ]. [1 pt]

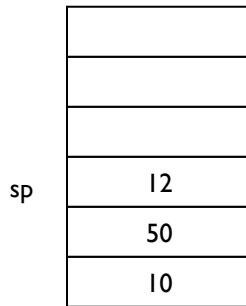
a) LIFO (Last-In-First-Out)      b) LILO (Last-In-Last-Out)      c) FIFO (First-In-First-Out)

2. Queue is a [                    ]. [1 pt]

a) LIFO (Last-In-First-Out)      b) LILO (Last-In-Last-Out)      c) FIFO (First-In-First-Out)

3. Given the following contents of an **array** implementation of a stack, show the contents of the stack and the location of top (stack pointer, sp) after doing the following operations:

```
stack.pop();
stack.push(7);
stack.push(8);
stack.push(9);
stack.pop();
stack.push(11);
```



[1.5 pts]

4. Given the following contents of a **circular array** implementation of a queue, Show the contents of the queue and the locations of front and rear after doing the following operations:

```
queue.dequeue();
queue.enqueue(7);
queue.enqueue(8);
queue.enqueue(9);
queue.dequeue();
queue.enqueue(11);
```

[1.5 pts]

