

Q1 Instructions

0 Points

To receive full credit on this quiz, you must score at least 50%.

The Github repo for Lecture 7 is at <https://github.com/ucsd-cse12-sp21/ucsd-cse12-sp21.github.io/tree/master/lectures/lecture-07>

Q2 Generics

1 Point

Refer to the ArrayList implementations of stacks and queues used in class:

Which of the following are true of possible implementations of ALQueue and ALStack? Select all that apply:

- ☒ enqueue and push could use the same implementation (but dequeue and pop would have to differ)
- ☒ dequeue and pop could use the same implementation (but enqueue and push would have to differ)
- ☐ ALQueue can initialize the ArrayList to be empty, but ALStack cannot
- ☐ Both MUST add new items at the end of the ArrayList (at the highest index)
- ☒ They can use exactly the same implementation for size()

Q3 Generics

1 Point

Refer to the ArrayList implementations of stacks and queues used in class and the following code:

```
ALQueue myQ = new ALQueue();  
myQ.enqueue("A");  
myQ.enqueue("A");  
myQ.dequeue();  
myQ.enqueue("C");  
myQ.enqueue("B");  
myQ.enqueue(myQ.dequeue());  
myQ.enqueue("D");  
myQ.enqueue(myQ.dequeue());  
System.out.println(myQ.toString());
```

What is printed?

- ☐ front → A, A, C, B, D ← back
- ☐ front → A, B, C, D ← back
- ☐ front → A, C, B, D ← back
- ☒ front → B, A, D, C ← back
- ☐ front → B, D, A, A ← back