

Submit your code and any other answers to Canvas. The lab is open book.

1. Implement a class named `LinkedStackTest`. Implement a method with signature `transfer(S, T)` inside `LinkedStackTest` that transfers all elements from stack `S` onto stack `T`, so that the element that starts at the top of `S` is the first to be inserted onto `T`, and the element at the bottom of `S` ends up at the top of `T`. Implement a main method inside `LinkedStackTest` to test your transfer method. You can use `LinkedStack` objects with `Integer` as the data type for generics.

2. Implement the `clone()` method for the `ArrayStack` class. Your `clone()` method should be inside `ArrayStack` class. You can first call `super.clone()`. Then you can clone the data array of the class using a command like

```
other.data = data.clone();
```

after instantiating an `ArrayStack` object called `other`. Finally you can return `other` (i.e. 3 lines of code inside the clone method is sufficient). You can study the `clone()` method in `SinglyLinkedList` class.

Files to submit

Question 1

`LinkedStackTest.java`

Question 2

`ArrayStack.java`