

Implement the following exercises using the following Java class definitions:

```
public class Node {
    String data;
    Node next;
}

public class LinkedList {
    Node head;
}
```

You may not use the Java API LinkedList class.

1. Implement a LinkedList method named **create** that defines an empty linked list.
2. Implement a LinkedList method named **isEmpty** that determines whether a list is empty.
3. Implement a LinkedList method named **isFull** that determines whether a list is full.
4. Implement a LinkedList method named **clear** that clears the list (this should be just head=null) but let them think.
5. Implement a LinkedList method named **duplicate** that creates a duplicate (deep copy) of the list.
6. The method `previousElement` has the following prototype:

String previousElement(String target);

The method will return the value (data) of the element preceding the element with a data that corresponds to target or null (if no preceding element exists).