Linked List EXERCISES - Solutions

Problem 1. Linked lists

See the linked lists lecture slides for a step-by-step execution of the code and an illustration of the objects created during the process.

Problem 2. Using the LinkedList and Node class definitions above, write a method double() for the LinkedList class that doubles the value attributes of all nodes in a LinkedList. You may assume that for each node in the list, the value attributes consists of integers.

```python
def double(self):
    n = self._head
    while n!= None:
        n._value = n._value * 2
        n = n._next
```

Problem 3. Using the LinkedList and Node class definitions above, write a method first_even() for the LinkedList class that returns the first node in the linked list whose value is even. If there are no even values, the method returns None.

```python
def first_even(self):
    current = self._head
    while current != None:
        if current._value % 2 == 0:
            return current
        current = current._next
    return None
```