AREP Lab 1

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1 Introduction

This laboratory intended us to provide the mean and the standard deviation of a given set of doubles. To achieve this, I made my own implementations of linked list and node. This document intends to explain the implementations of this objects.

1.1 Linked List

The linked list is a list that can hold any kind of value, as it is a generic implementation. Each node that make the linked list has a pointer to the next and the previous nodes to it.

It has 3 attributes

1. The size of the linked list.
2. The head of the linked list.
3. The tail of the linked list.

1.1.1 Size

An int that holds how many items the linkedlist has.

1.1.2 Head

A reference indicating which Node is the first of the linked list Has public getters and setters

1.1.3 Tail

A reference indicating which Node is the last of the linked list Has public getters and setters

1.2 Node

The Node is implementation is a generic one It has 3 attributes:

1. The value that the node holds.
2. The next node.
3. The previous node.

1.2.1 Value

Because of the generic implementation of the node, the value can be any java object. This attribute has it's public getters and setters

1.2.2 Next node

Each node knows which nodes is the next one to them, and stores a reference to that node. This attribute has it's public getters and setters

1.2.3 Previous Node

Each node knows which nodes is the previous one to them, and stores a reference to that node. This attribute has it's public getters and setters

References

docs.oracle.com/javase/7/docs/api/java/util/LinkedList.html

docs.oracle.com/javase/7/docs/api/java/lang/Iterable.html