

Assignment 5: Implementation of IntergerArrayList and IntegerLinkedList

We have to implement two type of integer storage structure – an array list and a linked list. There are methods between both the storage structure which have the same functionality and act in a similar way. Rather than implementing these methods again in both of the storage structure we use interfaces for all the common methods i.e. provide a skeleton structure which gives the body for the array list and linked list structure. This interface provides all the functions to be implemented in both of the classes. The IntegerStorageImplementation class is the super class of both the IntergerArrayList and IntegerLinkedList class, so these both class inherits all the method signature of the super class. The IntegerStorageImplementation and IntergerArrayList & IntegerLinkedList have a is a relationship between them.

Although the program was a not that arduous but there were a few problems which we encounter during the implementation like there were times when the methods of the super class was not functioning properly. Although the methods of the IntegerArrayList as an individual file were running properly but we encountered problems while synchronizing it.

Albeit the problems, we were able to get a broader knowledge about inheritance, abstract class and interfaces, and how they work.

