

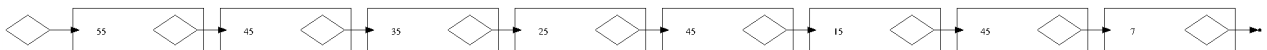
# Algorithms and datastructures

## Advanced c++ and linked lists

February 14, 2020

### 1 Introduction

In this and the next lab sessions, we will implement a linked list datastructure in c++. The given source code contains a .cpp test file and a .h header with an incomplete linked list implementation. Your task is to complete this implementation so that all tests succeed. Implement this step by step, one test at a time.



### 2 Background

We will use modern advanced c++ concepts for this assignment. You are probably not familiar with these so it is best to spend the majority of the first session studying them in depth. Read chapter 15 from <https://www.learncpp.com/cpp-tutorial/15-1-intro-to-smart-pointers-move-semantics/>

### 3 Assignment

Study the given source code.

- What classes are there ? How are they related to each other ?
- Comment out all the tests in the .cpp file except for the first one. Why does this fail ? Implement the required parts.