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|  | **Assignment 1** |
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Introduction

Implementation of Strings using the following types of smart pointers:

* Copied Pointers
* Owned Pointers
* COW with Reference Counting
* COW with Reference Linking

How to run

The zip file includes separate folders for each type of smart pointers implementation e.g. Copied Pointers folder has the implementation using copied pointers and it contains source.cpp, StringBuffer.cpp and StringBuffer.h (header file). Same goes for other folders and implementations.

Approach

You need a sound understanding of smart pointers and how they are implemented as well as their benefits regarding memory leaks and program efficiency. Each type of smart pointer implementation has its own different approach used in this assignment.

Profiling Data

Visual Studio has been used measuring the time of execution for each implementation of smart pointers.