

Lab 05 - Nodes Problems

Direction: Submit typed work in the Labs directory of your github repositor or dropbox, or upload to the google classroom assignment. Each part should be a separate files. The files named should be "lab5A.cpp" and "lab5B.cpp" respectively.

Part A: In class

Your objective is to write the definition of the function `Minimum()` whose header is

```
double Minimum(Node<double>* root)
```

It returns the minimum value from the singly linked list referenced by *root*. If *root* is referencing an empty list, the function returns 0.

Part B: Take home

Your objective is to write the definition of the following functions

- ☐ the function `MidAppend()` whose header is

```
template <typename T>
void MidAppend(Node<T>*& data, Node<T>* addon)
```

It appends the linked list referenced by *addon* to the linked list referenced by *data* starting after the middle node of *data*. For instances, if *data* = [a, b, c, d, e] and *addon* = [f, g, h, i, j]; then after the call of the function, *data* = [a, b, f, g, h, i, j, c, d, e].

- ☐ the function `NotEqual()` whose header is

```
bool NotEqual(Node<bool>* op1, Node<bool>* op2)
```

Given that *op1* and *op2* references doubly linked lists that represent binary numbers, the function returns true if the list referenced by *op1* is not equal the list referenced by *op2*. For instances, if *op1* = [0, 0, 1, 1, 0] and *op2* = [1, 0, 0, 1], the function will return true. Do not assume that the lists are the same size.