

Lab 06 - Nodes & Stacks 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 "lab6A.cpp" and "lab6B.cpp" respectively.

Part A: In class

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

```
template<typename T>
void BackwardRotation(Node<T>*& root)
```

Given that `root` is referencing a null-terminated doubly linked list, the function makes the first node of the linked list referenced by `root` the new last node of the linked list referenced by `root` given that the linked list contains at least two nodes.

Part B: Take home

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

```
bool IsValidWord(string wrd)
```

It returns true, if `wrd` consists only of As and Bs and it contains the substring "aab" where *a* and *b* can be in any case; otherwise, it returns false. For instance, the function calls `IsValidWord("aAabbB")` and `IsValidWord("aBAb")` will evaluate to true and false respectively. You must use a stack.