Abbreviations used :

DS -> Data Structure

Project #2: Generic CPP Data structure library (a mimic of many of the great methods in .NET)

**A:** Types of Data Structures:  
 Linked List  
 Stack  
 Trees  
 Graphs

1. Linked List:-

\*constructed using Template feature of C++

Member function : insert(), insertAt(), insertRange(), insertRangeAt(), delete(), deleteAt(), deleteRange(), deleteRangeAt()

The insert() and insertRange() methods will insert the passed data at either beginning or at the end of the target DS depending upon the optional index passed (0 for beginning and 1 for end)  **#DONE IMPLEMENTING**

The insertAt() and the insertRangeAt() methods will insert the passed data element /array at the specified index only. **#DONE IMPLEMENTING**

The remove() method deletes the 1st item if no index parameter passed and the last item if END macro is passed.

\*an overloaded definition should be such that the supplied argument itself gets deleted from the list

The removeRange() method deletes the specified length of items as the argument to it from the beginning if no 2nd argument is passed and deletes the same length from end if the END macro is passed as the 2nd argument

\*there can be another overloaded definition for removeRangeAt()

The removeAt() method simply deletes the element at the index specified as the argument.

The removeRangeAt() method deletes the length of items from the given position as in the argument list. Has two arguments – length of items , start index

*\*implement a special method getridOf(); which will take an argument whose every instance form the referenced list must be removed.* ***DONE IMPLEMENTING***