**Split**

Create a linked list called **myList** from an input file (inputSplit.txt) that contains an even number of first names. The number of items in the file is unknown.

Create a split function that divides the newly created linked list into two equal sublists: myList and myList2. For example, originally **myList** would point to (John, Jack, Jill, Jim). After the split function, **myList** would point to john and jack and **myList2** would point to jill and Jim.

Create a traverse function that accepts a pointer to each of the above linked lists and write their entire contents into a file (outputSplit.txt).

**Merge**

Create two linked lists, **myList3 and myList4,** from the input file (inputMerge.txt). Each of the linked lists will point to five cities.

Create a merge function that connects the two lists together into a single linked list.

Feed the single linked list into the traverse function which writes its content into a file (outputMerge.txt)

Summary:

You need to write at least 3 functions: split, merge and traverse. The inputs will come from two input files (inputSplit.txt and inputMerge.txt). The output should be written to output files (outputsplit.txt and outputmerge.txt). Your program should be in a single .cpp file.

For this assignment, you have to read from two separate files. Here is a snippet of code that should help you with the assignment.

ifstream in;

int main()

{

    char A[10];

    in.open("in1.txt");   //open first file

    in>> A;                  //read from the first file

    in.close();               //close the first file

    in.clear();               //reset all the bits in the file stream

    in.open("in2.txt");  //open the second file

    in>> A;                 //read from the second file

    in.close();              //close second file

}