#include "SingleListPalindrome.h"

#include<string>

using namespace std;

SingleListPalindrome::SingleListPalindrome()

{

}

SingleListPalindrome::~SingleListPalindrome()

{

}

void SingleListPalindrome::setHead(int x) {

head = new Node();

head->data = x;

}

void SingleListPalindrome:: addNode (int x){

Node \*newNode = new Node();

if (head->next = nullptr) {

head->next = newNode;

}

newNode->data = x;

newNode->next = tail;

tail = newNode;

}

bool SingleListPalindrome:: isPalindrome(Node \*node) {

bool palindrome;

string tempString = "";

while (node != nullptr) {

char temp = (char)node->data;

tempString.append((string)temp);

node = node->next;

}

palindrome = isPalindrome2(tempString);

return palindrome;

}

bool SingleListPalindrome::isPalindrome2(string tempString) {

int length = tempString.length();

for (int i = 0; i<length; i++)

if (tempString[i] != tempString[length - i - 1])

return false;

return true;

}

int SingleListPalindrome::Main() {

setHead(1);

addNode(2);

addNode(3);

addNode(2);

addNode(1);

cout << isPalindrome(head);

return 0;

}

//Created using Microsoft Visual Studio