CS 300 Data Structures and Algorithms – Spring 2011
Programming Assignment #2 (50 points) Due: February 22nd 2011

A string is a palindrome if it can be read forward and backward with the same meaning. Capitalization, special characters and spacing are ignored. For example, *anna* and *go dog* are palindromes.

- Read the string from standard input, and implement the following programs.
  - (A) (30 points) Write a **recursive** algorithm to determine whether a string is a palindrome.
  - (B) (20 points) Write an **iterative** algorithm to determine whether a string is a palindrome.

Test your programs with the following two palindromes

- *Madam, I'm Adam*
- *Able was I ere I saw Elba*

Also test your programs with at least one case that is not a palindrome, such as,

- *I like Data Structures and Algorithms!*

All programs are evaluated on correctness, output, user-friendliness, code structure, indentation and comments. Submit files on network using the following command: (Compile and test the program files on the lab machine before submitting)

~cs300d/bin/handin prog-assign2 <your file name(s)>