Practice Exercise #37: Palindromes

http://www.comp.nus.edu.sg/~cs1020/4_misc/practice.html

Objective:
Programming with recursion

Task statement:

A *palindrome* is a word, phrase, number, or other sequence of symbols or elements, whose meaning may be interpreted the same way in either forward or reverse direction. ~ Wikipedia.

In this exercise, we ignore characters that are not letters in the English alphabet, and also ignore case sensitivity. The table below shows some examples of palindromes and non-palindromes.

Palindromes	**Non-palindromes**
Radar	Moon
tEstSeT	NEVER
No, it can assess an action.	Norma is as selfless as I, Ron.
I'm a pup, am I?	Borrow, rob?

Note that we consider an empty string to be a palindrome.

Write a program **TestPalindromes.java** to read some lines of text, and determine if each line is a palindrome. It should contain a recursive method **isPalindrome(String str)** that returns true if **str** is a palindrome, or false otherwise.

Sample input file "palindromes.in":

```
Radar
Moon
No, it can assess an action.
Borrow, or rob?
123aA123
```

Sample run:

```
java TestPalindromes < palindromes.in
"Radar" is a palindrome.
"Moon" is not a palindrome.
"No, it can assess an action." is a palindrome.
"Borrow, or rob?" is a palindrome.
"123aA123" is a palindrome.
```