Palindrome Exercise

Create a java class Palindrome.java

The purpose of this class is to determine if a word is a palindrome. The word is passed into the program via the command line. For example, when you execute this program:

java Exercise12 madam

The word madam is passed into the program on the command line.

The main method must extract the word and then determine if that word is a palindrome. If the word is a palindrome the program should print <word> is a palindrome!. If the word is NOT a palindrome! the program should print <word> is NOT a palindrom.

Sample output:

C:\code\java Exercise12 madam

madam is a palindrome!

C:\code\java Exercise12 bob

bob is a palindrome

C:\code\java Exercise12 joe

joe is NOT a palindrome

* The definition of a palindrome is: a word, phrase, or sequence that reads the same backward as forward, e.g., *madam* or *nurses run*.
* Your program only has to handle words. Don’t worry about phrases or sentences.
* DO NOT USE THE StringBuilder class “reverse()” method! That’s cheating!! :) But you can use your won reverse() method.
* Use a for loop to iterate through the String characters. Methods you should think about using in String: length() charAt(), toLowerCase()
* Make your program handle case, for examle Madam is a palindrome.

ADVANCED

If you want more of a challenge have your program handle phrases/sentences. In this case you will have to get rid of all non-word characters (spaces, punctuation etc…). Here is a palindrom sentence you can test with. **Never a foot too far, even.**