# StringUtil

**Create a new project called StringsProjects, create two new classes StringUtil and StringTester.**

**StringUtil Method 1. String Reversal**

Create a method that receives a String and returns a String that is the exact reversal of the characters in the first String.

**public static String stringReversal(String input)**

**StringUtil Method 2. CasePunctWord**

Create a method that receives a String and returns a String value without any punctuation, spaces and all letters are converted to lowercase.

Madam, I'm Adam ==> madamimadam

A man, a plan, a canal: Panama ==> amanaplanacanalpanama

**public static String casePunctWord(String input)**

**StringUtil Method 3. Palindrome**

Create a method that receives a String and returns a boolean value of true if the String is a Palindrome and false if it is not. A word is a palindrome if it reads the same forwards and backwards.

The idea of a palindrome can be extended to phrases or sentences if we ignore details like punctuation. Call your casePunctWord method to get the String returned with no spaces, punctuation, or capitol letters.

If the "word" obtained from a phrase in this manner is a palindrome, then the phrase is a palindrome. Your method should ignore the case of the letters. A palindrome is determined by considering only alphabetic characters (a – z, A – Z) and numbers (0 – 9) as valid text.

Note: The World’s Longest Palindrome, created at 8:02 PM on the 20th of February (a palindromic time/date - 20:02 02/20 2002) is reported at <http://www.norvig.com/palindrome.html>

**public static boolean palindrome(String input)**

**StringTester Method 1. Main Method**

**public static void main(String[] args){**

**System.out.println(StringUtil.stringReversal("Good day to you and you!"));**

**System.out.println(StringUtil.stringReversal("How do you do?"));**

**System.out.println(StringUtil.casePunctWord("Hello! How are you?"));**

**System.out.println(StringUtil.palindrome("Madam, I’m Adam"));**

**System.out.println(StringUtil.palindrome("racecar"));**

**System.out.println(StringUtil.palindrome("computer"));**

**}**