



Palindromes

Write a C++ program that will allow the user to enter a word or sentence and then inform the user if it is a palindrome.

Palindromes are words or sentences that are spelled the same way backward and forward.

In the case of sentences, it is permissible to play with spaces and punctuation.

Word Examples: radar, level, racecar, mom

Sentence Example: "Madam, I'm Adam."

Pseudocode

- Get input from user
- Using a **For** loop and a second variable, remove any non-alphabetical characters (ie. spaces, punctuation).
- In the loop above, you should also convert all the characters to either uppercase or lowercase. Otherwise, if the user types in "Bob", then the reverse is "boB" and the program will not recognize the fact that they are actually the same.
- Using a **For** loop and a second variable, reverse the individual letters in the word.
- Using an **If** statement, compare the original word to the reversed word.
- Display a message stating whether or not the word or sentence is a palidrome.

Palindrome Examples

The following is a sampling of palindromes, with authors credited where known:

Lewd did I live, & evil I did dwel. (John Taylor)
Cigar? Toss it in a can. It is so tragic. (J.A. Lindon)
Doc, note. I dissent. A fast never prevents a fatness. I diet on cod. (Peter Hilton)
Rise to vote, sir (1925, unknown)
A man, a plan, a canal: Panama! (a tribute to Theodore Roosevelt from Leigh Mercer)
Campus motto: Bottoms up, Mac!
Dog doo! Good God!
He lived as a devil, eh?
Pull up, Eva, we're here! Wave! Pull up!
Marge lets Norah see Sharon's telegram.
Now, sir, a war is won!
Was it a rat I saw?
Too hot to hoot

Source: The Palindromist Magazine.