

# Checking Palindrome

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## 1 Palindrome

A **palindrome** is a word that is the reverse of itself—that is, it is the same word when read forwards and backwards.

For example: \* "madam" is a palindrome \* "abba" is a palindrome \* "cat" is not \* "a" is a trivial case of a palindrome

The goal of this exercise is to use recursion to write a function `is_palindrome` that takes a string as input and checks whether that string is a palindrome. (Note that this problem can also be solved with a non-recursive solution, but that's not the point of this exercise.)

```
In [1]: def is_palindrome(input):
        """
        Return True if input is palindrome, False otherwise.

        Args:
            input(str): input to be checked if it is palindrome
        """

        # TODO: Write your recursive palindrome checker here

        pass

In [ ]: # Test Cases

        print ("Pass" if (is_palindrome("")) else "Fail")
        print ("Pass" if (is_palindrome("a")) else "Fail")
        print ("Pass" if (is_palindrome("madam")) else "Fail")
        print ("Pass" if (is_palindrome("abba")) else "Fail")
        print ("Pass" if not (is_palindrome("Udacity")) else "Fail")
```

Show Solution

```
In [ ]:
```