

## Week 2 Homework Tasks

### Question 1: Palindrome Check

A palindrome is a word that reads the same in both directions e.g. racecar  
A single character word "I" is a palindrome & a blank string "" is a palindrome

The procedure should return a Boolean True or False depending on if the string is a palindrome or not.

```
def ispalindrome(string):  
    if (????????):  
        return (?????)  
    if (????????????):  
        return ??????????  
    else:  
        return ???????
```

### Question 2: Step by step through the list

To append 55 at the end of the list, it is necessary to walk down the list to find the last cell.  
The steps are as follows:

1. Make the current pointer (arrow) 'front'.
2. Check if the current pointer is null (points at nothing).
  - a. If not, the current pointer  $\leftarrow$  the next pointer of the current cell
  - b. Repeat
3. Create a new cell, containing 55
4. Make the next pointer of the current cell point to the new cell

Write a similar set of steps for removing the number 33.