

CIS 231

Python – Ch. 9

Case study: word play

9.1 – Reading word lists

- The `open()` function opens a plain text file
 - Creates a file object that marks its spot in the file
- Read a string comprising the next line of text in the file by calling `readline()`
- You can remove *whitespace* (spaces, tabs, newlines) with the string's `strip()` function
- You can iterate through each line in the file by using a `for-in` loop

9.3 - Search

- Search is a common task whenever we have multiple pieces of data (or entities like string that have multiple components)
- The simplest approach is a linear (or sequential) search, where each item is inspected one at a time until the item is found
- Don't forget that `in` works for looping through the chars in a string, *and* to see if a character is in that string

```
if letter in forbidden:
```

9.4 – Looping with indices

- *indices* – the plural of index
- If you need the index of where something occurs, you can loop on indices (alt. to `while` on p. 84)

```
def is_abecedarian(word):  
    for i in range(len(word) - 1):  
        if word[i + 1] < word[i]:  
            return False  
    return True
```

Next Time

- Ch. 10 – Lists!
 - A list is a sequence
 - Lists are mutable
 - Traversing a list
 - List operations
 - List slices
 - List methods
 - Map, filter and reduce
 - ...and a bunch more