

PRACTICE WITH STRINGS

CS 125

Working with a partner/group, use the following steps to solve each of the following problems.

- (a) Plan your function on the white board (either on the classroom wall or on Zoom). Write out your entire program. Think about what errors might occur and how to fix them.
- (b) Plan multiple test cases for your function. What input will you send to your function? What value should the function return?
- (c) *Only after you have completed steps (a) and (b) should you type your code in Python.*
- (d) After you have typed your function, run your test cases. Does your function work? If not, how can you fix it?

1. Write a function `removeNonAlpha(mystr)` that removes all non-alphabetic characters from a string `mystr`. That is, your function should accept a string of text, and then return a string containing the same text but with all non-alphabetic characters removed. For example:

```
removeNonAlpha("abc123!xyz") returns "abcxyz"
```

2. Write a function `removeSubstr(mystr, sub)` that removes the first occurrence of string `sub` from string `mystr`. For example:

```
removeAll("Mississippi", "ss") returns "Miissippi"
```

3. Write a function that extracts text from inside of HTML tags. Your function declaration should be:

```
def extractText(HTMLstring):
```

A call to `extractText("<i>some text</i>")` should return `"some text"`.

Hint: consider the `find` and `rfind` Python string methods.

4. Write a function that converts a word to pig Latin. The procedure for converting a word to pig Latin is as follows:
 - If the word begins with a constant, then all letters before the initial vowel are moved to the end of the word, and then `"ay"` is added to the end. For example, `"pig"` becomes `"igpay"`, and `"glove"` becomes `"oveglay"`.
 - If the word begins with a vowel, then add `"yay"` to the end. For example, `"eat"` becomes `"eatyay"`.