

Homework 2  
Advanced Python Programming  
Due Date: 10/10

1. (*Remove text*) Write a program that removes all occurrences of a specified string from a text file. Your program should prompt the user to enter a filename and a string to be removed. Here is a sample run:

```
Enter a filename: test.txt
Enter the string to be removed: morning
Done
```

2. (*Count characters, words and lines in a file*) Write a program that will count the number of characters, words, and lines in a file. Words are separated by a whitespace character. Your program should prompt the user to enter a filename. Here is sample run:

```
Enter a filename: test.txt
1777 characters
210 words
71 lines
```

3. (*Write/read data*) Write a program that writes 100 integers created randomly into a file. Integers are separated by a space in the file. Read the data back from the file and display the sorted. Your program should prompt the user to enter a filename. If the file already exists, do not override it. Here is a sample run:

```
Enter a filename: test.txt
The file already exists

Enter a filename: test1.txt
20 34 43 ... 50
```