APCS – Mr. Ascione
Word ArrayList

OBJECTIVE: This lab was designed to review basic class creation and to introduce and demonstrate how to use an ArrayList.

SPEC: In this project, you will be completing methods for a Word class and a Words class that consists of an ArrayList of Word objects. The Word class stores a word and has the ability to determine the number of vowels in that word. The Words object will store a list of Word objects and also perform a few different operations on them. Write methods to return the Word with the most characters and the Word with the least characters.

ENHANCEMENT: Sort the items and maintain sorted order. All new items should be inserted in the proper position. Removing items should not change the alphabetical order.

SAMPLE OUTPUT:

```
C:\Windows\system32\cmd.exe
[one, two, three, four, five, six, seven, alligator]
Words with 2 vowels = 5
Words with 3 vowels = 0
Words with 4 vowels = 1
Words with 2 chars = 0
Words with 3 chars = 3
Words with 4 chars = 2
Words with 5 chars = 2

After removing words with 3 chars:
[three, four, five, seven, alligator]

Number of vowels in the words removed == 4
```

TEST CASES:

one, two, three, four, five, six, seven, alligator

fun, fly, four, six, times, ten, plus, eight

alligator, chicken, dog, cat, pig, buffalo

Files Needed:

Word.java

WordList.java

WordListRunner.java