***Project 4 - Due November 9, 2012***

***Obstacles***

I ran into a few minor obstacles on a few of the methods. The first few methods were straightforward, but I encountered a minor issue in the rotateLeft and rotateRight methods. When I would run the loop to move each string in the array to the next position, the final string would be overwritten. I eventually saved the final string into a temporary string variable and placed it in the array after the loop. I did not run into any other problems until the partition method. There were several problems that I had to solve in order to create the method without using another array. First, I had to figure out how to move them to before and after the separator without creating a new array. I decided to do this by using the rotate methods. I initially incremented the position after each rotate, but when I was moving the string to the end and incrementing the position, I would skip one of the strings. To fix this, I did not increment if I was moving the string to the end. The last issue I had was that it would run into an infinite loop when it would only rotate left, as the position would stop incrementing. To ensure that the loop would end correctly, I ran the loop for the length of the string.

***Test Data***

*Using Given Main Function, Also Check:*

string h[7] = { "obiwan", "minnie", "han", "simba", "", "jabba", "ariel" };

*for appendToAll*

works correctly (g,4,"?") == 4...

using emptyArray(emptyArray,0,"!") == 0

*for lookup*

works correctly (h,7,"han") == 2

if string not found (h,2,"han") == -1

case matters (h,7,"hAn") == -1

emptyArray (emptyArray, 0, "anything") == -1

*for positionOfMax*

works correctly (h,7) == 3

no elements (emptyArray, 0) == -1

*for rotateLeft*

works correctly (g,4,1) == 4

using emptyArray (emptyArray,0,0) == -1

*for rotateRight*

works correctly (e,4,1) == 1

using emptyArray (emptyArray,0,0) == -1

*for flip*

works correctly (f,3) == 3...

using emptyArray (emptyArray,0) == 0

*for differ*

works correctly (h,4,g,4) == 2

different numbers (h,3,g,5) == -1

always equal (g,10,g,2) == 2

search further than end, and empty array (emptyArray,0,h,2) == -1

*for subsequence*

works correctly (h,7,e,4) == 2

never equals (h,7,g,4) == -1

*for lookupAny*

works correctly (h,7,f,3) == 2

no matches (g,2,f,3) == -1

using emptyArray (emptyArray,0,h,7) == -1

*for partition*

works correctly (h,7,"jabba") == 3

all less than separator (h,7,"zzz") == 7

using emptyArray (emptyArray,0,"anything") == 0