Tate Dyer
CS1 - HW6 debug questions

1a) ABC,JKL - 9
POOL, ZYYV - 10

b) For both, the codeword is a higher letter in the alphabet and therefore corresponds to a greater
number than the original. When they are subtracted there is not a problem with the number being greater
than 25.

c) If original is late in the alphabet and the codeword is early in the alphabet when the corresponding
numbers are subtracted it will be a negative number. For example 2(b)- 26(z)=-24. To fix this use modulus
of 26 when subtracting to always get a number from 0 to 25 as a shift because the remainder is equivalent
to the shift.

2a) deadpool, swimming - 0
lacrosse, crowd - 3

b) The first example does not encounter the bug because it does not have any letters in common so it is able
to output that there are no matches. The second example is able to run because none of the letters in common fall
at the end of the words where it encounters a bounds error on other examples.

c) A bug is that when it goes through the while loop after it finds one letter in common to compare each letter after
if either of the words ends it hits an out of bounds error while still trying to compare them. to fix it added a statement
within the while to check if either of the words is past its length in the checking process.