

# Assignment 4

## Text Statistics Pascal to Ada

### Reflection Report

#### Programming Process/Reflection:

I found this programming assignment quite enjoyable! I liked taking the Pascal algorithm, fixing it and transforming it in Ada. I was already familiar with Ada from the second assignment so I could focus on building a robust algorithm instead of stressing over the syntactic details of the language itself. Even though I am most robust with C, I could still rack my brain and successfully complete this in Ada.

The biggest problem I had with this assignment is Ada's "beautiful" (sarcasm) way of dealing with strings. I had to constantly convert to and from stings and unbounded strings. I cannot get input with a string, and cannot access single characters of unbounded strings. Each time that I pass a word into one of my functions that search for something (isWord, isNumber ...) I need to pass it in as an unbounded string, and then convert it into a string. It is also evident to note that the conversion itself is not trivial. I need ensure that the string has sufficient memory and copy over the unbounded string into a substring of string that is the size of unbounded string:

```
wordString(1..length(wordUnboundedString) := to_String(ordUnboundedString);
```

In terms of my output, I put a lot of effort to make sure it is as accurate as possible! I have multiple check conditions for isWord and isNumber and I am confident in my statistical output.