Shaquille Johnson Theory of Computing Course Project 3

## Relevance:

The program uses the idea of Turing Tape which is storing the different parts of speech and based on which ones it finds it then uses those to re-order the sentence into a question. The main implementation of this is in the first part which takes the sentences verb and moves it to the beginning in order to make the sentence a question.

## Effort:

It took me about an hour of reading the article and understanding what it was using the tape for. Then four to five hours of debugging the program and getting it all written out. The parsing of the sentences was probably the easiest part which was unexpected as I didn't think that the tape simulation would take as long as it did.

The most interesting and possibly difficult thing to do was understand the recursive part of the turing algorithm. It takes the fact that language is recursive and applies that to some aspects of the implementation. For instance the sentence, "The rose that is red is in the vase" presents the problem of that is red, referring to itself in this case. However this was solved by taking the closest previous descriptor, "rose" in this case, and going back on the tape until it found that or the beginning of the tape. It allows for a larger number of strings to be tested than my current implementation and is more human like in it's execution.