Alex Sheehan
CSCI 4830
Machine Learning
Analysis #2

**Using 1 late day.**

1. How did the learning rate affect the convergence of your SGA implementation?

   The learning rate affected the convergence of the SGA.

2. What was your stopping criterion and how many passes over the data did you need to complete before stopping?

   It was about 5000 passes, and about 1000 iteratios. The stopping criterion was going through all the examples in the training set and updating the weights in self.w.

3. What words are the best predictors of each class? How (mathematically) did you find them?

   I found the best predictors of each class by finding the max weight after the sga updates and matched the index of the max with the index in the **vocab. I found "like" had the highest weight**.

4. What words are the poorest predictors of classes? How (mathematically) did you find them?

   I found the best predictors of each class by finding the min weight after the sga updates and matched the index of the min with the index in the vocab. **I found** "June" had the lowest weight.