

### Project 4 Report

For my implementation of project 4 I decided to use a version of polynomial hash codes that I found called cyclic shift hash codes. This version replaces the non-zero constant  $r$  with a cyclic shift by some number of bits. I also used the division method for the compression of my algorithm. I chose an  $m$  value of 31469 which is a prime value approximately 25% larger than the dictionary of 25,144 words. Finally, I went with separate chaining where the array points to a linked list to store all the items as my collision resolution strategy for this project.