FIT3155 Assignment 1 Question 2 Report

Yap Wing Joon (31862527)

My binary version of Boyer-Moore doesn't differ much from the Week 2 version. Besides the fact that I failed to implement Galil's optimization using the start and stop variables, the only difference is the unnecessary use of the bad character rule for binary data. The reason for not using the rule is that the shifts produced from it are only 1 position in all cases. I noticed this while looking at the difference in shift sizes between the bad character rule and good suffix rule. After this discovery, I concluded that we can just use the good suffix rule along with matched prefix for shifting, otherwise just shift by 1 instead of computing the extended bad character rule which adds to space complexity by O(m).