Name: CHEN, CHENG

Student ID number: 21250331

Week 4 beginning Monday 11th October 2021 (CS370)

This week I learned how to code a list with a search box(inputting any strings you want) on the mobile by using javascript(react), a very small but real program. In the tutorial, I understood how to express different sets by using different symbols with a TM, such as RejTM, HaltTM, etc..., what is the concept of Dovetailing, how to correctly use it, and how to improve that the halting problem is undecidable. I have drawn several sets to DFA and NFA by using Thompson's Algorithm and successfully converted NFA to DFA on different conditions including Union, Intersection, and Complement. Actually, I feel like there are more and more connections between different kinds of courses. Out of the class time, I learned parser analysis and context-free grammars, using java, python and racket did a few practices about algorithms in Codewars(coding practice website). I hope I can get 1500 scores in Codewars before graduation. Furthermore, I created a repository in GitHub which could record documents I produced in the study.