In the data preprocessing stage, I worked with my teammate together to process data and converted files into the required format for later use. Specifically, among the data mentioned in section 3.2, I acquired Travel Frequency and Grade from the raw dataset. I defined the variable Travel Frequency by observing the characteristic of the IP geolocation data, though it turned out to be not as effective as the other variable Distance. I conducted Markov Chain and Association Rule Mining in both section 3.4 and 3.5. In section 3.4, I defined the three periods (whose definition is later refined with the co-effort of me and my teammate) and grouped the students accordingly to the Distance. In section 3.5, I conducted Markov Chain and Association Rule Mining on the clustering analysis result obtained by my teammate. In section 4, I focus more on our RQ1 in section 4.1 and the first two paragraphs in section 4.3. But in fact, I believe my teammate and I fairly contribute to section 4, since it is a product of our discussion and reflection on this project.