I was doing an internship at IBM China Research Laboratory this summer from June 16 to August 11. Our group was doing a consulting program from Hainan government. The government hoped us to finish an analysis report about the agriculture and tourism in Hainan. I worked on an optimization project dealing with the remaining shelf life of tomatoes and the cost of cold chain system. The purpose of this optimization is to extend the remaining shelf life and reduce the cost. We chose tomato as an example to build an integer and quadratic mixed model. This model can help to choose the best temperatures in transportation and storage and whether to use cold chain considering the distance, value of product (in our model is tomato) and so on. The model we finished this summer is simple and it can be improved if more factors were taken into account. Our group may do some further work to make the model better in the second stage of the consulting program.