

Individual Contribution on his Project

Chenxin Ma, Xi He

December 18, 2014

We have a happy teamwork on this project. Because of the weak background we had on integer programming and programming on Python before this semester, each task we did in this project was from tremendous reading and thinking, each function we implemented was from many times revising and debugging. We met many difficulties, but luckily, we solved a majority of them. Every discussion was effective and encourages us to go further. Both of us tried our best on this final project.

Contribution from Chenxin Ma

In terms of implementation, I was responsible for implementing the first step in pre-processing, primal phase II procedure, dual phase II procedure, branch and bound algorithm. Typically, I wrote the following files: `pre-processing.py`, `prime_phase_II.py`, `dual_Phase_II.py`, `Branching.py` and a part in `main.py`.

In terms of numerical experiment, I was responsible for those experiments on binary knapsack instances. Those instances are from the the author of the paper we study, Prof. Goycoolea.

In terms of writing report, I was responsible for describe algorithms I implemented and the experiments I made.

The above things are mainly my contribution. However, a lot of them were finished after discussions and cooperation with Xi. I could not finish these tasks without teamwork.