You should encounter some difficulty with the Kantorovich formulation for the larger data set. In this part, we want to solve the Gilmore-Gomory formulation (exactly the same formulation we discussed in class) using column generation. The master problem is given below.

$$
\begin{aligned}
\min \quad & \sum_{j=1}^{N} x_j \\
\text{s.t.} \quad & \sum_{j=1}^{N} a_{ij} x_j = b_i, \qquad \forall i = 1, \ldots, m \quad \text{(Demand Constraints)} \\
& x_j \geq 0, \qquad \forall j = 1, \ldots, N.
\end{aligned}
$$