Connected tour

Solve the following optimization problem

Find the tour starting from 1 with min distance

$$\min \sum_{i,j} U_{i,j} D_{i,j}$$

$$\forall i \ G_i - L_i = \sum_j flow_{i,j}$$

$$flow_{i,j} \le U_{i,j} M$$

$$\sum_c U_{i,c} = 1$$

$$\sum_c U_{c,i} = 1$$

