

$$\text{Min} \quad \sum_{i=1}^N \sum_{j=1}^N d_{i,j} x_{i,j}$$

$$\text{s.t.} \quad \sum_{j=1}^N x_{j,j} = 10 ,$$

$$\sum_{j=1}^N x_{i,j} = 1 \text{ for } i = 1, \dots, N ,$$

$$x_{i,j} \in \{0,1\} \text{ for } i, j = 1, \dots, N ,$$