**Problem:** Given the cost of a set of tickets on any given day is defined by matrix *C*. On which day should each ticket be sold in order to minimize the total cost to purchase the tickets. A maximum number of tickets can be sold on any given day and tickets can be sold/allocated only once.

**System of equations to define the problem**

**Decision Variables:**

**Objective Function:**

where *Ctd* is thecost of ticket *t* on day *d.*

**Subject to the following constraints:**

Daily max on ticket sales

where *tmaxd* is a vector defining the maximum number of sales per day.

Allocation constraint (tickets can be sold only once)