|  |  |
| --- | --- |
| Decision variable of Travel | where,  (dim 1) s = index of place at which travel starts,  (dim 2) e = index of place at which travel ends,  (dim 3) d = day of travel |
| Homebase Starting index | 0 |
| Homebase Ending index | N+1 |
| Indices of travel places | 1, 2, …., N |
| Total number of Days |  |
| Cost of Admission at a place ‘s’ |  |
| Time Factor |  |
| Cost Factor |  |
| Distance between place ‘s’ and ‘e’ |  |
|  |  |
|  |  |
| Objective: Total Visits |  |
| Budget constraint |  |
| In degree out degree match constraint |  |
| Place singularity constraint |  |
| Self-loop constraint |  |
| No path to Source Base or from End Base  (No Invalid Path constraint) |  |
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