

Instance Format:

Size: Number of transition nodes in the graph. Not including node 0 (origin) nor node $n + 1$ (sink).
Clusters Number of clusters in the graph.

! Subsequent $n+2$ lines: First line is the coordinates for the origin node and last line is the coordinates for the sink node.

x_i y_i δ_i Coordinates for each node i and parameter δ for each node in the graph

! Subsequent lines:

p_j b_{ij}

//*****END OF FILE

p_j is defined as the profit associated to cluster j , and matrix b_{ij} is a Binary parameter equal to 1 iff node i belongs to cluster j . 0 otherwise.

The travel cost from node i to node j ($\text{cost}[i][j]$) is computed as:

$\text{ceil}(100 * (\sqrt{(x_i - x_j)^2 + (y_i - y_j)^2}) - \delta_i/2 - \delta_j/2 + 0.5);$