1

The code reads the number of nodes (nn) and edges (mm) from the first line. Initializes an adjacency list (adj) to represent graph, a list to track visited nodes (vstd), and a list to store the shortest distance (dist). The 'dijkstra' function takes the source node as an argument. It intializes the distance from the source to itself as 0 and sets all other distances to infinity. For each iteration it selects the node with the minimum distance (not visited yet) as the current node (vtcd). Marks the current node as visited. Updates the distances to its neighboring nodes if a shorter path is found. Then the code reads the source node from the last line of input. writes the resulting shortest distances to the output file, or -1 if a node is unreachable.