1. Read the number of routers and cost matrix from the input.
2. Read the source router from the input.
3. Initialise an array dist to store the minimum distance from the source to each router.
4. Initialise an array flag to keep track of visited routers.
5. Set all elements of dist to a large value (infinity), except for the source router which is set to 0.
6. Repeat the following steps for count iterations:
   1. Find the router v with the minimum distance from the source among the unvisited routers.
   2. Mark router v as visited by setting flag[v] to 1.
   3. Update the distance of all unvisited routers w adjacent to v by comparing the current distance dist[w] with the sum of the distance to v and the cost of the edge between v and w. If the sum is smaller, update dist[w] with the new distance.
7. Print the shortest path costs from the source to each router.
8. Exit the program.