Minor Project 1

**Aim: -** To develop electric bus system which will tell us the shortest route between source and the destination.

**Description**

1. This will be simple Java Program.
2. It will take information of source and destination station of electric bus, from the user and display and the shortest bus route to reach the destination.
3. It will also be having a route map for commuter’s better navigation.
4. The idea is implemented using graph. The graph has nodes and edges. Nodes represent bus station that will be containing certain information regarding that station like its name, its fare, and the station which it connects.
5. Edges (the connection between two nodes) represent the distance the two stations and the cost of each edge will be equal to the distance between the two of its connecting stations(nodes).
6. By using algorithms like Dijkstra, the shortest path between the source station and the destination station is determined, and accordingly, the fare is being calculated based on the total distance between the two stations.
7. Finally, the bus route between the two stations and the total fare is displayed.