Team Number-10

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Problem Statement:

There is a crowded city with a lot of streets to travel . But during a medical emergency ,an ambulance needs to take the shortest path to the patient and take him to a hospital .
So the aim is to find the nearest ambulance to the patient and the nearest hospital to which the patient has to be taken. And also to check the availability of the seats in the hospital.
And finally to check for faulty ambulances.

Approach:

1.The projects idea is to use 2 different Dijkstra's algorithms first one for the nearest ambulance to the patient and second for the nearest hospital to the ambulance.
2.Dijkstra algorithm is a single-source shortest path algorithm. Here, single-source means that only one source is given, and we have to find the shortest path from the source to all the nodes which may represent, for example, road networks.
3.We are using file method to read the values
4.Then creating a adjacency matrix for the weights.And finding the minimum weight
5.For the faulty we are updating the value of the ambulance is -1 as Dijkstra's doesn't work on negative values so it will exclude it.
6.For the number of seats of a hospital is taken care by another file input and after each entry reducing the value by one and updating in the file.