IIIT Vadodara
CS263: Assignment #8

November 30, 2021

1 Problem 1

Suppose your course instructor has made n groups of students in the class which contains unqeual number students. For each group a TA has been assigned. Each TA's has checked the assignment of their respective group and sorted the assignments in their roll number. TA's has to submit the total assignments to the course instructor in sorted form. How TA's will combine the assignments so that they minimized the total number of comparison to sort the files.

2 Problem 2

In your Gandhinagar city, there are various locations such as Vidhan sabha, Achardham, Gandhi Asharam,...,etc. There exists a road network that connects all the locations. Due to elections in Gujarat and rallies, all the paths between any two locations act as one-way. You and your friends have decided to visit all the major locations as today is a holiday. You have to start your traveling plan from the hostel and after visiting each location you return to the hostel. The condition is you cannot follow the same path which you have already visited. Write an algorithm that gives you the efficient route to successfully execute your plan otherwise you drop your today's plan.