

Shri G. S. Institute of Technology and Science
Department Of Computer Engineering
CO 2407: DATA STRUCTURES
Lab Assignment # 01 (Structures & File)

Marks: 10 points

Submission Date: 24 July 2016@23:59

Demo Date: 25 July 2016 - 30 July 2016

Late Submission: Not allowed

No copying allowed. If found then students involved in copying will fail in this course.

1. Write a program that takes triangles as input from file and determines if they have a point in common.
2. Write a program that takes triangles as input from file and determines that they are equivalent.
3. Write a program that takes two rational number as input and implement all operations on these rational numbers.
4. Write a program that takes two complex number as input and implement all operations on these complex numbers.
5. Read the integer data from the File. This file contains all of the 100,000 integers between 1 and 100,000 (inclusive) in some order, with no integer repeated. And do the following task:
 - a. How many number are multiple of 11?
 - b. How many number are multiple of 9?
 - c. Compute the number of inversions (two elements $a[i]$ and $a[j]$ form an inversion if $a[i] > a[j]$ and $i < j$) in the file given, where the i^{th} row of the file indicates the i^{th} entry of an array.
 - d. How many number are at their right locations ($a[i] = i$) ?