

LAB MID TERM -2

1 .Write a program in C++ to overload following operators on two fractions e.g. 3/8 and 5/8.

- a) == (It should return 1 if both fractions are same and returns 0 if unequal)
- b) > and < (if not same)
- c) + (addition of two fractions)
- d) - (subtraction of two fractions)
- e) * (Multiplication of two fractions)
- f) / (Division of two fractions)

2. (Synchronize threads) write a program that launches 1,000 threads. Each thread adds 1 to a variable sum that initially is 0. You need to pass sum by reference to each thread. In order to pass it by reference, define an Integer wrapper object to hold sum. Run the program with and without synchronization to see its effect.

3. (*Parallel sum*) Implement the following method using Fork/Join to find the sum of a list.

public static double parallelSum(double[] list)

Write a test program that finds the sum in a list of 9,000,000 double values.