**Discrete Structure Lab Questions**

1. Write a program to find the GCD of two numbers using Euclidean Algorithm.
2. Write a program to express GCD of 2 integer as linear combination of them using extended Euclidian algorithm.
3. WAP to implement Chinese remainder theorem to solve the system of simultaneous congruence.
4. WAP to check whether the numbers are pairwise relatively prime or not.
5. WAP to find the sum of two integer working with n tuples and by using moduli.
6. WAP to find the factorial of a number using recursion.
7. WAP to implement recursive algorithm for merge sort.
8. WAP to implement recursive algorithm to find b^a mod m.
9. WAP to implement recursive algorithm to find b^a.
10. Write a program to implement recursive algorithm for linear search algorithm.
11. WAP to implement recursive algorithm for binary search.
12. Write a program to show that is a tautology.
13. Write a program to display the truth table of p∧q, p∨q and p→q.