Lab Works (Cryptography / BSc.CSIT 5th -sem)

Lab 1: Write a program to implement Shift Cipher. (Encryption/Decryption/ Input (key/plaint text for encryption/ cipher text for decryption) should be taken from user).

Lab 2: Write a program to implement Playfair Cipher. (Encryption/Decryption/ Input should be taken from user, Display the key matrix as well).

Lab 3: Write a program to implement Rail Fence Cipher. (Encryption/Decryption/ Input should be taken from user).

Lab 4: Write a program to implement Vigenere Cipher. (Encryption/Decryption/ Input should be taken from user).

Lab 5: WAP to implement Euclidean Algorithm to find GCD of given numbers.

Lab 6: Write a program that computes additive inverse in given modulo n.

Lab 7: Write a program which takes two numbers and display whether they are relatively prime or not.

Lab 8: Write a program to implement Extended Euclidean Algorithm. (Display the results of iterations in tabular format)

Lab 9: WAP to compute multiplicative inverse in given modulo n using Extended Euclidean Algorithm.

Lab 10: Write a program to implement   Hill Cipher (Key matrix of size 2*2/ Encryption/ Decryption/ Input should be taken from user).

Lab 11: WAP to demonstrate how output of S-Box (S1) is generated in DES.

Lab 12: Write a program to implement Robin Miller algorithm for primality test.

Lab 13: Write a program that takes any positive number and display the result after computing Totient value

Lab 14: Write a program to compute primitive roots of given number.

Lab 15: WAP to compute discrete log of given number (provided the modulo and primitive root).

Lab 16: WAP to implement Diffie-Helman Key Exchange Algorithm.

Lab 17: WAP to implement RSA Algorithm (Encryption/Decryption/ Input Should be taken from user)

Lab 18: WAP to implement Elgamal Cryptographic System

Lab 19: Write a malicious logic code (Trojan Horse/Virus) program that performs some malicious works.