Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat
Department of Computer Science and Engineering
B.Tech III (Semester VI)
Information Security and Cryptography- CS302

Lab Assignment 5

1) Design and implement a program to perform encryption and decryption using the Hill Cipher with 2x2 matrix. Consider the following inputs for the program.

   For Encryption:
   a) Input1 – Plaintext, Key matrix, and Inverse key matrix
   b) Output1 – Ciphertext

   For Decryption
   a) Input2- Ciphertext
   b) Output2- Plaintext

2) Implement a program to generate and verify the key matrix for Hill cipher.

3) Design and implement a program to perform encryption and decryption using the Hill Cipher for nxn matrix. Where $2 <= n <= 5$.

Note: Take input from the text file and store the output in the text file for all of the above programs.