## **Abstract**

Due to the technology improvement, many multimedia files like picture have to be secured on its distribution. One of the techniques to secure the data is to encrypt them with cryptographic algorithm such as Enhance 1-D Chaotic Key Based (ECKBA). In cryptography method, somebody can use a key (password) where can change the original data (plaintext) into a form which can't be read (ciphertext), and change the ciphertext into plaintext. In this Final Task is made the implementation by using Matlab 7.1 and analysis the comparison between ECKBA and ECKBA with a preprocessing. The parameter that will be compared to are *avalanche effect*, the speed of encryption and decryption, the size of files after encryption and decryption, and noising level.

**Keywords**: picture, Enhance 1-D Chaotic Key Based Algorithm (ECKBA), kriptograpfi.