## **Abstract**

Due to the information system technology improvement, possibly easier to get the data by party which have no right to get the information. Consequently, data security is one thing that have to do. One of way to take care of the data security is using a cryptography method that is representing science and art to hide data from the unauthorized people.

In this Final Task is implemented by using Borland Delphi 7 and analysis the comparison between Helix algorithm and Phelix algorithm. Helix algorithm and Phelix algorithm are stream cipher algorithm. The parameters that will be compared to are process time of encryption and decryption and how much memory that used while encryption and deryption.

Based on the simulation, encription / description time process for Helix and Phelix algorithm has the difference of time process which is slighty different because there are difference in key mixing and keystream process. The number of memory which is used by both of these algorithm in encription / description process. are slighty different too.

**Keywords:** cryptography, Helix, Phelix, stream cipher