**ABSTRACT** 

Today the business development of digital content has progressed very rapidly. But

these advances also gave birth to new opportunities for classic crime in the field of

information technology, that is piracy. Content that should be the legal property of the

manufacturer and is legally owned by the person who bought it, could easily be misused

by parties who are not responsible. The reasons of the use of digital data are the easily

distribution over the internet, also due to the ease and grace in the multiplication and

storage for future use. One form of digital content which is quite often be a victim of

piracy is the multimedia data.

In this final project the task that have been done is implementation of Luc algorithm

on multimedia data in the framework of security for the distribution process of

multimedia data. The reason of the use of Luc algorithm are in terms of security levels

that have in common with the methods of the most powerful and widely used today

(exponent based methods), also due to the fact that Luc algorithm is an public key

cryptography algorithm so that Luc algorithm does not require the security process in the

distribution of the key.

Based on the results of testing, the system of encoding multimedia data using Luc

algorithm has good performance. Average encryption speed is 170 Kb/second, while the

average decryption speed is 163 Kb/second. The ratio between the resulting ciphertext

and message is 1,01.

**Keywords:** encryption, multimedia data, Luc algorithm, encryption, decryption

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