FINANCIAL DATA SECURITY APPLICATION USING ELGAMAL PUBLIC KEY CRYPTOGRAPHY METHOD
(Case Study: Toko Amanah Yogyakarta)

ABSTRACT

Data is a collection of information or basic descriptions of a thing (object or event) obtained from observations (observations) and can be processed into more complex forms, such as information or solutions to certain problems. Amanah store provides various types of Muslim clothing, worship equipment and hijab accessories. Every store has financial data, financial data is data that contains financial records and transactions that occur in the store, both buying and selling transactions and other transactions. Data is very valuable for all computer users, the store does not have a data storage and security application, or it still uses notes manually to make payment transactions and store data in unsecured folders. Today cryptography is a method used to secure data. Cryptography has three important elements, namely key generation, encryption and description. Elgamal's algorithm is an asymmetric algorithm, so for the cryptography process it takes two keys, namely the public key for the encryption process and the private key for the decryption process. By using this application, Toko Amanah can store confidential financial data into a database without fear of someone else stealing or reading the contents of the transaction data. Therefore, a data security system is needed to maintain the confidentiality of information so that it is maintained.

Keywords: Cryptography, Elgamal, Encryption, Decryption, Database