ABSTRACT

The development of science and technology is growing rapidly. The data that is received, become as a valuable item. Because of that reason, we must protect the data with any ways. The protection of the data by using signature that signs the indentity of the owner. This signature can be counterfeited and be imitated by other people.

The Problem of this case will solve with digital signature. The digital signature is not a signature that was digitalized, but there are bits that signs the indity of the owners. Digital signature is designed by using Digital Signature Standard (DSS) such as Digital Signature Algorithm (DSA), Rivest Shamir Adleman (RSA), hash function SHA-256 and SHA-512. In this project, the analysis of digital signature performance was done by using Digital Signature Algorithm (DSA) and Rivest Shamir Adleman (RSA) and calculating the parameters such as time processing, frequency distribution, brute force attack, and variancy.

From this project ,the development of digital signature was done with combining hash fuction, so can be used for bigger bits, the efficiency of time processing, survive with attacker and for many applications.

Keywords : *Digital Signature, Digital Signature Standard, Hash Function*