

Abstract

Currently, the SMS may be an important requirement in communication. With the SMS facility, then quickly a person can submit news, but the communication through the medium of SMS is not a communication point-to-point, through the SMS network. In SMS network, the security message is threatened to be read by people who are not responsible, it is necessary to process the encryption and decryption SMS.

The process of encryption and decryption of the SMS received and sent carried out in this final. The implementation of encryption and decryption algorithms SMS using RC6. RC6 algorithm has a processing time of encryption and decryption which tend to more quickly and have advantages in the field of data dependent rotation in encryption.

This final assignment counted and analyzed about message encryption and decryption time. Tests carried out by using the data the number of round, the number of characters, and a variety of key length. From the test results showed that the greater the number of round, the number of characters, and key length, the greater also encrypt and decrypt messages when needed.

Keywords: encryption, decryption, RC6 Algorithm, round, key length, encryption and decryption time.