ABSTRAC

The rise of the use of internet communication services, it allows digital data that is sent may be intercepted and modified by other parties. So we need a way to secure digital data, one of which implement cryptographic algorithms to encrypt the digital data such as text, pictures, video, and audio. The purpose of this research is to produce an application that can be used to encrypt and decrypt a video file with the RSA algorithm so that the video file can be safe from acts of piracy.

RSA is an asymmetric cryptographic algorithm. As a public key algorithm, RSA has two keys namely public key and a private key. Public key may be known to anyone, and is used for encryption. While the private key is only certain people are allowed to know and be used for the decryption process. During the factoring of large numbers into prime factors unaccounted algorithm, then during the same security RSA algorithm is secure.

RSA algorithm to be applicable in both the encryption and decryption of files encrypted video because video results displayed in the form of a black screen (BlackScreen). But the weakness of the RSA algorithm is capable of encrypted video files perfectly only a maximum capacity of 1 MB.

Keywords: Cryptography, RSA, WMV