ABSTRACT

The spread of computing has led to an explosion in the volume of data to be stored on hard disks and sent over the Internet. This growth has led to a need for "data compression", that is, the ability to reduce the amount of storage or Internet bandwidth required to handle this data. This paper provides an overview of data compression techniques and after that we suggest an algorithm to be used with a certain type of file to be compressed taking into consideration both the compression ratio and compressed file size. Further, we associate the proposed compression/decompression algorithm to encryption standards.

**Keywords** - Compression Ratio, Compression time, Huffman Coding, LZW, RLE, Arithmetic Coding, Avalanche effect.