Abstract— Watermarking is the process for copyright protection, and secure distribution of documents. To achieve watermarking, various images are watermarked at various bits (5, 6, 7, and 8). After being watermarked, PSNR values of images are calculated using EZW compression method at different wavelets. And it will be observed that image with the highest PSNR has the highest clarity.

Keywords— watermarking, psnr, bits, compression, wavelets

I. INTRODUCTION

Digital watermarking is the act of hiding a message related to a digital signal (i.e. an image, song, video) within the signal itself.1 Digital Watermarking is a technique which allows an individual to add hidden copyright notices or other verification messages or even classified information to digital media.1 Security is most important term in online transfer of data. So, different techniques and algorithms are developed to provide security. Watermarking is not an old concept but it had been used since the online transfer of data had started, when any information i.e. image, audio, video has been sent from one to other(sender to receiver) then it is necessary to maintain confidentiality and originality of a document, that there should be no change in the document at which had sent, so to maintain the originality and confidentiality there is need to add some kind of information which is known only to the sender and the receiver, and if any type of attack is applied on the document then it should be recognized to know about document. So there is a way by which we can sent the data/information being covered according to the document. And this way is known as “watermarking”.

II. PROPOSED WORK

The PSNR of different images can be achieved by applying some kind of algorithm or technique on images.

So, for this purpose following steps has to be followed:

A. First of all, an image is taken to calculate its PSNR in its normal form.
B. Then, watermark it by hiding some image in it.
C. Again calculate PSNR of image after being watermarked on different wavelets.

D. At last compare PSNR of both(normal and watermarked) images.

The purpose of this study is to compare the different values of an original and watermarked image using different wavelets on various parameters. Through this work it is going to be resulted that which method has the highest PSNR, further, which can be used for image clarity.

III. PROCESSFLOWCHART

![PROCESSFLOWCHART]

IV. BRIEF DESCRIPTION

In the research, various commands are used for comparison of images to test its reliability, and if the command has not been used then PSNR values have to
be calculated. The PSNR values are calculated on various wavelets using the technique.

The various wavelets are:
  i.) haar  ii.) sym  iii.) coif
  iv.) rbio  v.) dmey

The parameter of wavelets is:
  a.) PSNR

Sampling

Here is the working of all the wavelets which researcher used during research; with the help of all these wavelets it is easier for me to do the comparison. All the wavelets do their work accordingly and then at their various parameters values of normal images versus watermarked images are found. Now the question arises what is wavelet.

Thus wavelets are able to provide a great deal of compression and are therefore very popular in the fields of image and signal processing. Thus images are compressed on various wavelets using the properties of MATLAB and then from the compression methods best PSNR value is obtained.

V. CONCLUSION

From all the above study it is concluded s that PSNR is calculated at various wavelets to find the highest quality image, and the image with highest PSNR has the best quality.

REFERENCES