

Figure 4: Results for baboon image

During purposed method compression of color Lena image for fractal compression using quad tree compression decomposition with dwt the compression ratio is 64 percentages and the original size of Lena image is 99.5918kb and compressed size is 36.0469kb. When we done decompression procedure we will calculate PSNR is 19.4496db.

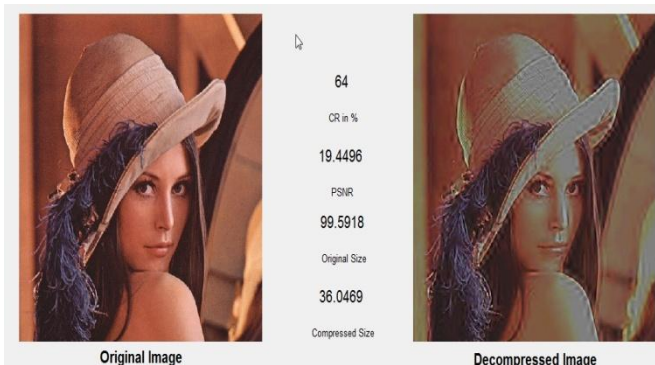


Figure 5: Results for Lena image

At last for compression and decompression procedure we calculate purposed method compression for pepper color image. During compression the compression ratio is 52 percentages and the original size of pepper image is 90.5078kb and compressed size is 43.7383kb. When we done decompression procedure we will calculate PSNR is 16.9306db.



Figure 6: Hybrid results for pepper image

From different color images baboon, Lena, pepper compression ratio of Lena image is higher than others. Lena image show higher compression ratio and PSNR value for compression and decompression procedure.

### 8. Graphical Representation

In graphically section we plot graph for purposed method for different images. In this firstly we shows the compression ratio analysis with baboon, Lena, and pepper images. Compression ratio is defined as the ratio of an original image to compressed image.  $CR = \frac{\text{original size} - \text{compressed size}}{\text{original size}} * 100$

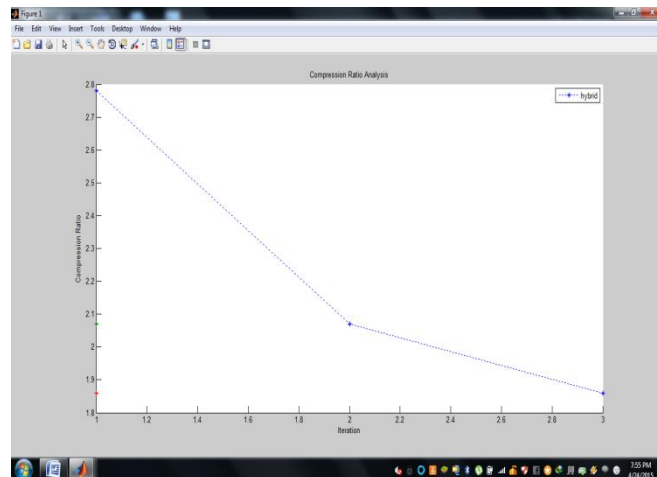


Figure 7: Graphical representations of CR

PSNR is the PSNR is peak signal to noise ratio is the ratio between the maximum possible power of signal to the corrupting noise that effect the fidelity of its representation. Inn psnr we measure PSNR ratio for three different images baboon, Lena and pepper.

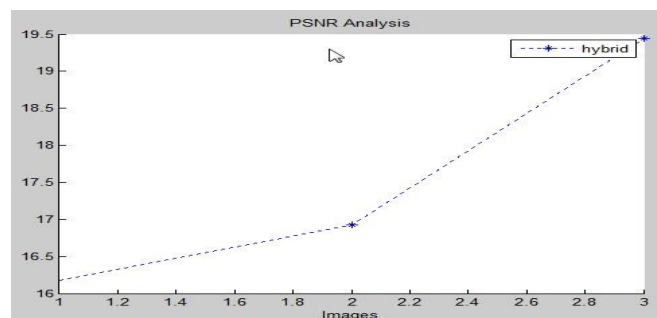


Figure 9: PSNR analysis

**Table 1:** Show the results of an different image

<i>Image name</i>	<i>Compression ratio</i>	<i>PSNR</i>	<i>Original size</i>	<i>Compress size</i>
Lena	64	19.4	99.5918	36.04
Bamboo	46	16.9	137.978	74.3564
Pepper	52	16.1	90.5078	43.7383

## 9. Conclusion and Future Scope

In fractal image compression the block size play a very important role. The quality of image and time is depended on the block size according to their dimensions and quantization value. We show compression and decompression results for various different images. The future scope of this methodology is that we will change the dimensions of the image and we will also calculate the threshold value and calculate the time of compression and decompression.

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