{UNIT-4}

VIDEO COMPRESSION

Compression :-

Compression is a reduction in Size of Data in Order to Save Space or transmission type time. For the Data transmission Compression Can be performed on just the data Containt or all the intire transmission unit depending on a no. of vectors.

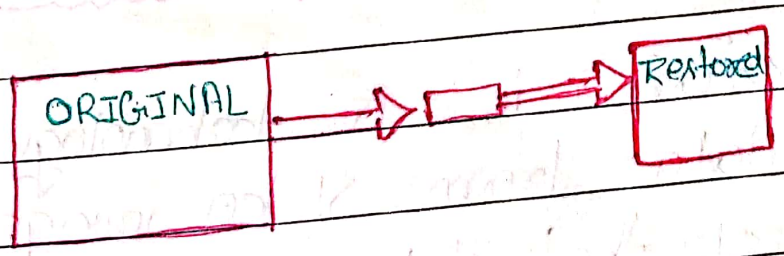
Data Compression

In term of Computer the Only limitation of multimedia presentation is that to Consume a lot of storage Space. In Ordered to reduced the Storage Space the multimedia Component must be Compressed. Compressing a file refferce to the process of Cutting down the Size of the file by using Special Compression technique. There are two type of

Compression technique are used:-

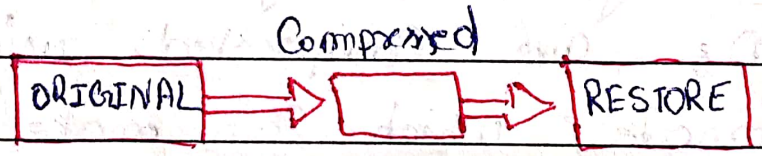
(1) LOSSY COMPRESSION :-

LOSSY Compression means that the Compressed file has less data in it than the Original file in Some Cases this translates the lower quality files because information has been lomed hence the name. However you can lose a Relatively large amount of Data before you Start to notice a difference. lossy Compression makes up for the loss in quality by producing Comparatively Small files. for eg→ DVDs are Compressed using the mpeg-2 formate, which Can make files 15-30 times Smaller, but the Still to tand to DVDs as having high quality picture.



(ii) LOSSLESS Compression :-

lossless Compression reffere to a Data Compression techniques that Reduce the Size of the file without permanamently discarding any information of the Original data. If an image that under gone lossless Compression is the Compressed the Original data Can be Reconstruct exactly. Exactly bit by bit i.e. idemtical to the Original image before it was Compressed image file formate null file formate used lossless Compression.



How Compression Work :-

Compression is a technology that removes the data from Video image, to reduce Size of the data appears file. It is done into two way :-

(i) Inter frame (ii) Intra frame

(i) Interframe :-

It removes duplicate data that appears within a single frame as for e.g it large area of sky a some sort of blue color only the value of one pixel need to be same along the location of where other identicaly pixel appered in the frame.

(ii) Intra frame :-

It looks for application information in frame that follow one another. As for e.g In a seen with files the background not change on at all between frame. In this case all of the data in the first frame is store. In the next frame only the data has change in store rest throwm away the system display, the first frame then up-data it with just the change store for the next frame.