**Report:**

Is there a trade-off between image quality and degree of compression? What would be a good value of K for each of the two images?

1. Thereexists a relationship between quality of image and compression degree.
2. Highly compressed images have lower quality due to limited no of colours.
3. Compression makes pixels with close colours to get similar colour. Thus, this reduces the number of colours and thereby decreases image quality.
4. Inversely, if k value gets increased, more colours can be shown in image which increases image quality along with increase in image size.

For both images K value can be 20 which gives about 50% size compression and clarity of image is good for 30 iterations.