* Easy for humans to recognize the style of a painter, but how would a computer do it?
* What this program basically does is it takes in a test image, analyzes the style of the painting and looks through the database of paintings containing different artist and compare the styles to output the closest match. The artists who appears the most number of times is considered the predicted answer.
* We tried a couple of ways how a computer may recognize a style:
  + Texture(material, medium and brush strokes)
    - Also dependent on the quality and condition of the photograph
  + Color
  + Composition
* **Texture:** To extract the texture we used a descriptor called Local Binary Patterns.
  + Mostly used with grayscale images
  + **Explain figure 1.**
* **Color Texture:**  Color LBP is like LBP but works in all three color planes (rgb)
* **Color:** used color histogram ff the images to analyse the paintings.
* **Composition:** Tiny Image descriptor
  + this down samples images into a 16x16 pixel image.
  + These pixels are then turned into a single vector which is used as a descriptor to compare with other images .
* **Data Set:** A total of 1040 paintings by eight different artists. Salvador Dali, Vincent Van Gogh, Katsushika Hokusai, Frida Kahlo, Henri Matisse, Claude Monet, Pablo Picasso and Georges Seurat.
* **The Experiment:** 
  + To test the program we ahd a test set of 25 paintings each from different artists in random and the test paintings were not present in the data set.
  + The features from each test painting was compared to all the paintings
  + Images similar to the test image are returned using different descriptors based on the L1 distance. Its chooses the 5 of the nearest neighbors.
  + These tests were carried out for 5 random test sets.

Hokusai- uikiyo-e painter