1. (i) Download and run the jupyter notebook 05.11 - K-Means. ipynb.

(ii) In the "two moons" example, how many clusters are needed until no cluster contains points from both moons?

(iii) In the digits example (#'s 0 - 9), which cluster center looks the least like a number? Why do you think this is?

(iv) In the color reduction application, change the # of colors in the simplified image. What does the K-means error represent in this application?

Original Image (10,000 pixels)   ? -color Image