HW1 Part A Report Minh Nguyen

1. Differences between unsupervised image segmentation methods and supervised semantic image segmentation methods:

* Unsupervised image segmentation:
  + No labeled data
  + Identify structures, patterns within the image using techniques like clustering
* Supervised semantic image segmentation:
  + Use labeled data
  + Train a model that can accurately classify each pixel in an image into one of the predefined semantic categories

1. Well known methods:

* Unsupervised image segmentation:
  + K-means clustering (with Elbow or Silhouette)
  + Mean-shift clustering
* Supervised sematic image segmentation:
  + CNN
  + OpenCV
  + PyTorch