

# K-means algorithm

- Given  $k$ , the *k-means* algorithm works as follows:
  1. Choose  $k$  (random) data points (**seeds**) to be the initial **centroids**, cluster centers
  2. Assign each data point to the closest **centroid**
  3. Re-compute the **centroids** using the current cluster memberships
  4. If a convergence criterion is not met, repeat steps 2 and 3