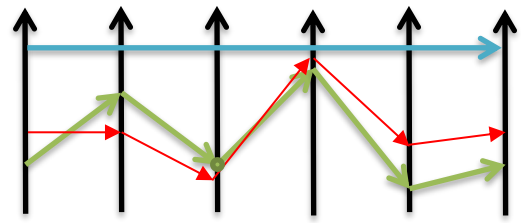
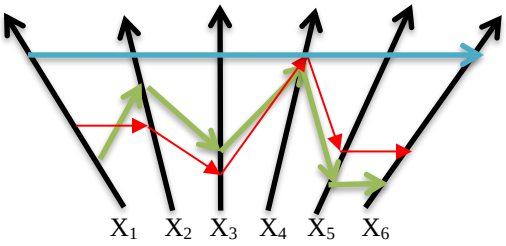
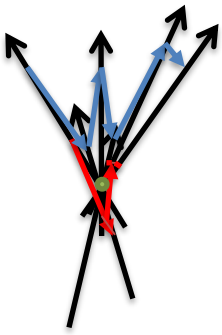
HW 3
Part 1



(a) Use HW1 to draw this picture

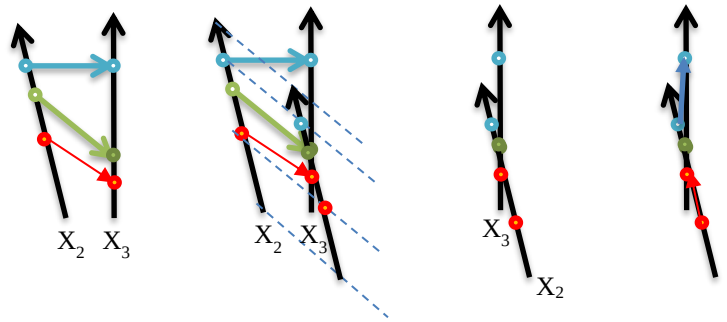


(b) Modify HW1 code to make this picture



(c) Make this picture by shifting X_1,X_2,X_4,X_5,X_6 to X_3.The green line from (b) is collapsed to a single green dot (small circle).

Algorithm for (c) is illustrated for X_2 and X_3 where X_2 is shifted to X_3 in a way such that the green point on X_2 is moving to the green point on X_3. Blue and red points also are moved parallel to the green point. Next the moved blue point on X_2 is connected by the arrow to the blue point on X_3.
Next the moved red point on X_2 is connected by the arrow to the red point on X_3.
The same process is applied when other X_i are moved to X_3.



Part 2. Generalize code above for three classes of and 100 6-D points read from the file

Part 3. Conduct computational experiments with 3 datasets on 100 cases each of 3 classes similarly to experiment in HW1. You can increase the angles of other axis X_i rlative to X_3 to make the picture less occluded.