"Designing a minimum distance to class mean classifier"

Two-class set of prototypes have to be taken from "train.txt" and "test.txt" files.

- Plot all sample points (train data) from both classes, but samples from the same class should have the same color and marker.

- Using a minimum distance classifier with respect to 'class mean', classify the test data points by plotting them with the designated class-color but different marker. Use the Linear Discriminant Function given below.

$$g_i(X) = X^T \,_i\bar{Y} - \frac{1}{2} \,_i\bar{Y}^T \,_i\bar{Y}$$

- Draw the decision boundary between the two-classes.
- Find accuracy.