```matlab
% labels the data in the "testing" group (based on nearest neighbors to a
 finalized set of centroids and
% centroid labels). Note that the finalized centroids should be designed
 through the use of the script
% cluster covid data.m

% Note - This script depends on cluster_covid_data.m to be run first.

close all
load("competition.mat")

% Label the testing data:
transformedTestingCases = (A * testingCases')';

testing_labels = zeros(height(transformedTestingCases),
 width(transformedTestingCases));
for i = 1:height(transformedTestingCases)
    testCase = transformedTestingCases(i,:);

    [~, assignedCentroid] = min(pdist2(centroids,testCase, 'euclidean'));
    testing_labels(i,:) = centroid_labels(assignedCentroid);
    disp("Test case " + i + " assigned to division " +
 centroid_labels(assignedCentroid));
end
```

*Test case 1 assigned to division 7*
*Test case 2 assigned to division 5*
*Test case 3 assigned to division 6*
*Test case 4 assigned to division 6*
*Test case 5 assigned to division 4*
*Test case 6 assigned to division 9*
*Test case 7 assigned to division 9*
*Test case 8 assigned to division 6*
*Test case 9 assigned to division 8*
*Test case 10 assigned to division 6*
*Test case 11 assigned to division 4*
*Test case 12 assigned to division 8*
*Test case 13 assigned to division 1*
*Test case 14 assigned to division 5*
*Test case 15 assigned to division 5*
*Test case 16 assigned to division 8*
*Test case 17 assigned to division 8*
*Test case 18 assigned to division 8*
*Test case 19 assigned to division 8*
*Test case 20 assigned to division 4*
*Test case 21 assigned to division 3*
*Test case 22 assigned to division 4*
*Test case 23 assigned to division 4*
*Test case 24 assigned to division 4*
*Test case 25 assigned to division 4*
*Test case 26 assigned to division 9*
*Test case 27 assigned to division 9*

*Test case 28 assigned to division 1*
*Test case 29 assigned to division 1*
*Test case 30 assigned to division 1*
*Test case 31 assigned to division 1*
*Test case 32 assigned to division 1*
*Test case 33 assigned to division 1*
*Test case 34 assigned to division 1*
*Test case 35 assigned to division 1*
*Test case 36 assigned to division 2*
*Test case 37 assigned to division 3*
*Test case 38 assigned to division 3*
*Test case 39 assigned to division 4*
*Test case 40 assigned to division 4*
*Test case 41 assigned to division 4*
*Test case 42 assigned to division 6*
*Test case 43 assigned to division 5*
*Test case 44 assigned to division 5*
*Test case 45 assigned to division 5*
*Test case 46 assigned to division 4*
*Test case 47 assigned to division 4*
*Test case 48 assigned to division 4*
*Test case 49 assigned to division 4*
*Test case 50 assigned to division 2*
*Test case 51 assigned to division 1*
*Test case 52 assigned to division 1*
*Test case 53 assigned to division 2*
*Test case 54 assigned to division 4*
*Test case 55 assigned to division 8*
*Test case 56 assigned to division 2*
*Test case 57 assigned to division 5*
*Test case 58 assigned to division 9*
*Test case 59 assigned to division 4*
*Test case 60 assigned to division 4*
*Test case 61 assigned to division 3*
*Test case 62 assigned to division 9*
*Test case 63 assigned to division 9*
*Test case 64 assigned to division 9*
*Test case 65 assigned to division 9*
*Test case 66 assigned to division 1*
*Test case 67 assigned to division 1*
*Test case 68 assigned to division 1*
*Test case 69 assigned to division 1*
*Test case 70 assigned to division 1*
*Test case 71 assigned to division 4*
*Test case 72 assigned to division 6*
*Test case 73 assigned to division 7*
*Test case 74 assigned to division 5*
*Test case 75 assigned to division 5*
*Test case 76 assigned to division 9*
*Test case 77 assigned to division 9*
*Test case 78 assigned to division 7*
*Test case 79 assigned to division 1*
*Test case 80 assigned to division 1*
*Test case 81 assigned to division 7*