

[illegible]

```

%classification.
count1 = 0;
for i = 1:n1
    for j = 1: length(group);
        distance1(j) = sum((pte1(i,:) - train(j,:)).*(pte1(i,:) -
train(j,:)).*lambda');
    end

    [y,si] = sort(distance1);
    knn = group(si);

    knn = knn(1:nknn);

    none = length(find(knn == '1'));
    ntwo = length(find(knn == '2'));

    if none > ntwo
        count1 = count1 + 1;
    end
end

count2 = 0;
for i = 1:n1
    for j = 1: length(group);
        distance1(i) = sum((pte2(i,:) - train(j,:)).*(pte2(i,:) -
train(j,:)).*lambda');
    end

    [y,si] = sort(distance1);
    knn = group(si);

    knn = knn(1:nknn);

    none = length(find(knn == '1'));
    ntwo = length(find(knn == '2'));

    if ntwo > none
        count2 = count2 + 1;
    end
end
end

```