```matlab
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function STDSP1
    prompt1 = 'What is the char 1? ';
    char1 = input(prompt1,'s');
    prompt2 = 'What is the char 2? ';
    char2 = input(prompt2,'s');
    disp('Running SVM on :');disp(char1);disp(char2);
    [training_label_vector, training_instance_matrix,
    testing_label_vector,testing_instance_matrix] = getData(char1,char2);
    %Using SVM

    %SVM Train
    model = svmtrain(training_label_vector, training_instance_matrix, '-s 0 -t 0 -c 1 ');% [,
    'libsvm_options']);%

    %SVM Test
    disp('_____Test training data_____');
    [pl, acc,decision_values] = svmpredict(training_label_vector, training_instance_matrix,
    model, [, 'libsvm_options']);
    disp('_____Test testing data_____');
    [predicted_label, accuracy,dv] = svmpredict(testing_label_vector, testing_instance_matrix,
    model, [, 'libsvm_options']);
    disp('_____SVM completed. Train Model: _____');
    disp(model);

    %?i{yi(xi · w + b) ? 1 + ?i} = 0

    %w = model.SVs' * model.sv_coef;
    %b = -model.rho;
    %y = predicted_label;
    %x = testing_instance_matrix;
    %wrong_indices = testing_label_vector==predicted_label;
    %wrong_label_index = find(wrong_indices==0);
    %disp(wrong_label_index);
    alpha = model.sv_coef;
    %slack = |decision_value| / |w|
    XI = zeros(numel(model.sv_indices),1);
    for i=1:numel(model.sv_indices)
        index_of_sv = model.sv_indices(i,:);
        distance = pl(index_of_sv,:)*decision_values(index_of_sv,:);
        XI(i,:) = 1- distance;
    end
    disp('Size of ? (ksi) is :');disp(size(XI));
    disp('XI(?i (ksi) ):');disp(XI);
end

function [training_label_vector, training_instance_matrix,
testing_label_vector,testing_instance_matrix] = getData(value1, value2)
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```matlab
filealpha = 'alpha.xlsx';
[x,alpha] = xlsread(filealpha);
[tf, index1]= ismember(value1, alpha);
start1 = 39*(index1-1)+1;
[tf, index2]= ismember(value2, alpha);
start2 = 39*(index2-1)+1;
%disp(index1);
%disp(index2);
disp('Start1:');disp(start1);
disp('Start2:');disp(start2);
file = 'Hand_Written_Data.csv';
fulldata =csvread(file);%,0,0,[0 0 320 77]);
disp(size(fulldata));

%training_label_vector
training_label_vector1 = ones(1,20);%fulldata(1,start1:start1+19); %
training_label_vector2 = -ones(1,20);%fulldata(1,start2:start2+19); %
training_label_vector = transpose( cat(2,training_label_vector1, training_label_vector2));
disp(size(training_label_vector));

%training_instance_matrix
training_instance_matrix1 = fulldata(2:321,start1:start1+19); %21:39
training_instance_matrix2 = fulldata(2:321,start2:start2+19); % 40:59
training_instance_matrix = transpose( cat(2,training_instance_matrix1,
training_instance_matrix2));
disp(size(training_instance_matrix));

%testing_label_vector
testing_label_vector1 = ones(1,19);%fulldata(1,start1+20:start1+38); %
testing_label_vector2 = -ones(1,19);%fulldata(1,start2+20:start2+38); %
testing_label_vector = transpose( cat(2,testing_label_vector1, testing_label_vector2));
disp(size(testing_label_vector));


%testing_instance_matrix
testing_instance_matrix1 = fulldata(2:321,start1+20:start1+38); %21:39
testing_instance_matrix2 = fulldata(2:321,start2+20:start2+38); % 60:78
testing_instance_matrix = transpose( cat(2,testing_instance_matrix1,
testing_instance_matrix2));
disp(size(testing_instance_matrix));
end
```