

```

clear all
clc

file = "/Users/charlesdavi/Desktop/Datasets/UCI/spam.txt";
dataset = csvread(file);

num_rows = size(dataset,1);
N = size(dataset,2) - 1;

tic;
sorted_dataset = sortrows(dataset,1:N);

for i = 1 : num_rows

    j = i + 1;

    current_vector = sorted_dataset(i,:);
    current_class = current_vector(N+1);
    break_loop = 0;
    last_match = i;

    while(j <= num_rows && break_loop == 0)

        if(sorted_dataset(j,N+1) == current_class)

            last_match = j;

        else

            break_loop = 1;

        endif

        j = j + 1;

    endwhile

    match_vector = sorted_dataset(last_match,:);
    delta(i) = norm(match_vector(1:N) .- current_vector(1:N));

endfor
toc

```