```
% 12/7

% dividing traindata in 1000 validation and 5000 training and 600 testing
%Speaker classification

data = train;
[a b] = size(data);
n1=1000; % # to separate out validationset from data
n2 = 600; % same for test
n=n1+n2;
r = randsample(a,n);
r1 = r(1:n1);
r2 = r(n1+1:n);

r1 = sort(r1);
r2 = sort(r2);

k=1;
j=1;
 val = [];
 tr =[];
 te =[];

for i = 1:a

    if  i ~= r1(k)

        if i ~= r2(j)
                tr = [tr; data(i,:)];
        else
            te = [te; data(i,:)];
            j=j+1;
            if j==(n2+1)
                j=1;
            end
        end

    else
        val = [val; data(i,:) ];
        k=k+1;

        if k == (n1+1)
            k=1;
        end


    end


end


% %KNN
```

```
t1= tr(:,1:26);
t2 = tr(:,27);
t3 =  val(:,1:26);
% t3 = ste(:,1:26);
[aa bb] = size(t3);

error_sp = [];
j=0;

for     n =  [1: 10 73:76 82:85]
 test_ = Nearest_Neighbor ( t1' , t2' , t3' ,n);
% test_ = EM ( t1' , t2' , t3' ,n);
%test_ = multisvm( t1' , t2' , t3');

for i = 1:aa
if test_(i) ~= val(i,27)
 j=j+1;
end
end

e  = j/aa*100;
error_sp = [error_sp [n;e]];
j=0;

end
```

Published with MATLAB® R2013b