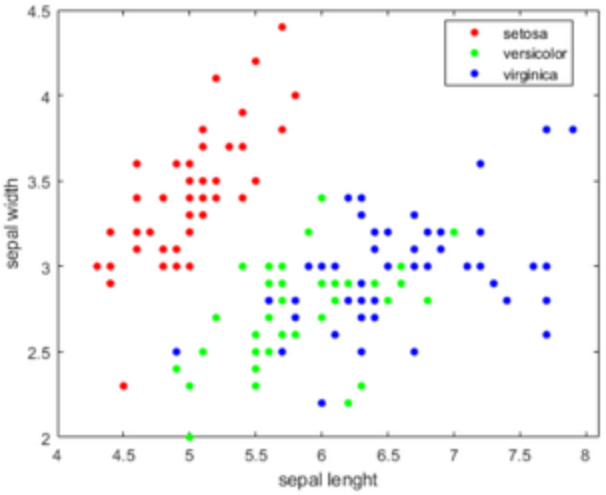
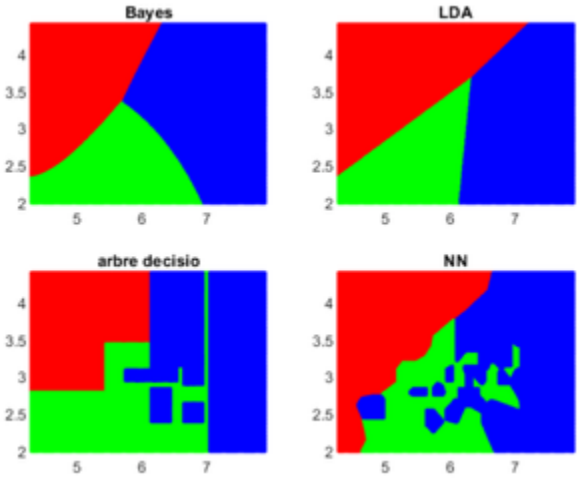
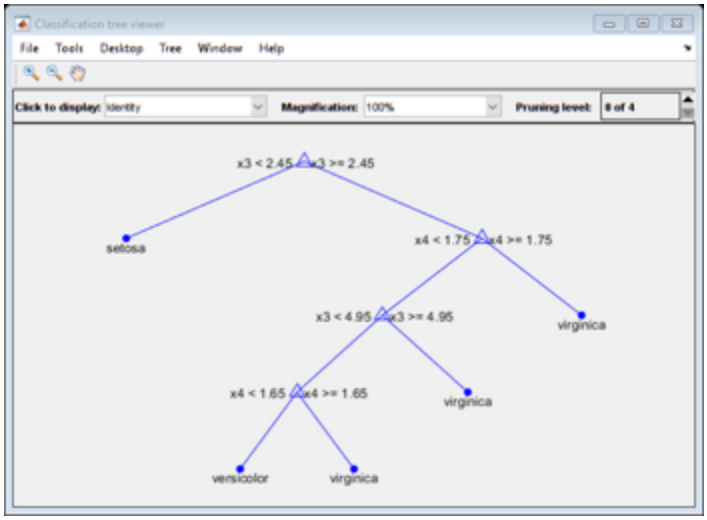
```
%%Laboratori 9 - Marti Ramon i Aina Garcia
load fisheriris
x = meas(:,1:2);
y = categorical(species);
labels = categories(y);
figure,gscatter(x(:,1),x(:,2),species,'rgb');
xlabel ('sepal lenght')
ylabel ('sepal width')
noms_c1 = {'Bayes', 'LDA', 'arbre decisio', 'NN'};
clssf{1} = fitcnb(x,y);
clssf{2} = fitcdiscr(x,y);
clssf{3} = fitctree(x,y);
clssf{4} = fitcknn(x,y);
x1rang = min(x(:,1)):.01:max(x(:,1));
x2rang = min(x(:,2)):.01:max(x(:,2));
[xx1, xx2] = meshgrid(x1rang, x2rang);
grid = [xx1(:) xx2(:)];

figure
for i = 1:4
    pred = predict(clssf{i}, grid);
    subplot(2,2,i);
    gscatter(xx1(:), xx2(:), pred, 'rgb');
    title(noms_c1{i});
    legend off, axis tight
end

classf{3} = fitctree(meas,y);
clases = resubPredict(classf{3});
error = resubLoss(classf{3});
[CM, ordre] = confusionmat(y,clases)
figure, view(classf{3}, 'Mode', 'graph');


CM =

    50     0     0
     0    47     3
     0     0    50


ordre =

  3×1 categorical array

     setosa
     versicolor
     virginica
```


setosa
versicolor
virginica
sepal width
sepal lenght
4.5
4
3.5
3
2.5
2
4
4.5
5
5.5
6
6.5
7
7.5
8


Bayes
LDA
arbre decisio
NN



Published with MATLAB® R2018b