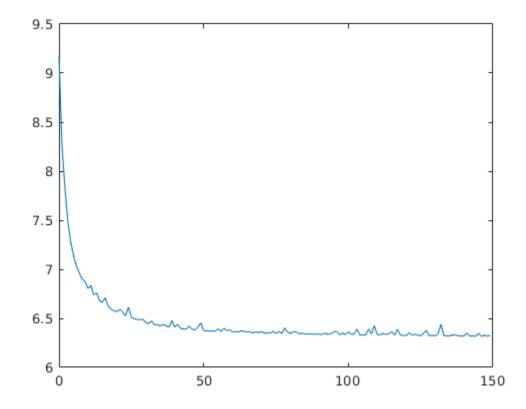
Linear Neural Network Homework

Bryn Louise

```
% load data
load('/home/louisebw/Downloads/IrisDataX.mat')
% define target classes
T = [ones(1,50), zeros(1,100)]
    zeros(1,50), ones(1,50), zeros(1,50)
    zeros(1,100), ones(1,50)];
% define parameters
alpha = 0.01;
NumEpochs = 150;
% train
[W, b, EpochErr] = WidHoff(X, T, alpha, NumEpochs);
NumEVec = [0:NumEpochs-1];
x1 = NumEVec;
y1 = EpochErr;
figure
plot(x1,y1)
figure
plotconfusion(T, W*X + b);
```



Confusion Matrix 49 100% 1 32.7% 0.0% 0.0% 0.0% 1 29 85.3% Output Class 0.7% 19.3% 2.7% 14.7% 21 46 68.7% 0.0% 14.0% 30.7% 31.3% 98.0% 58.0% 92.0% 82.7% 42.0% 2.0% 8.0% 17.3% 3 r \searrow **Target Class**

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