Ford Tang

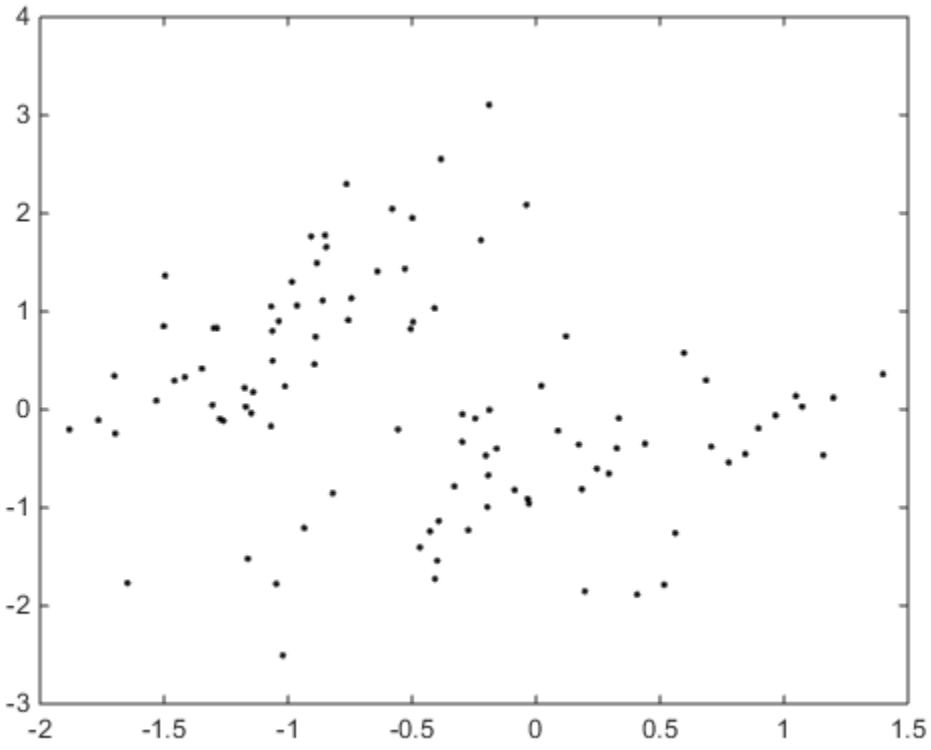
46564602

CS 178

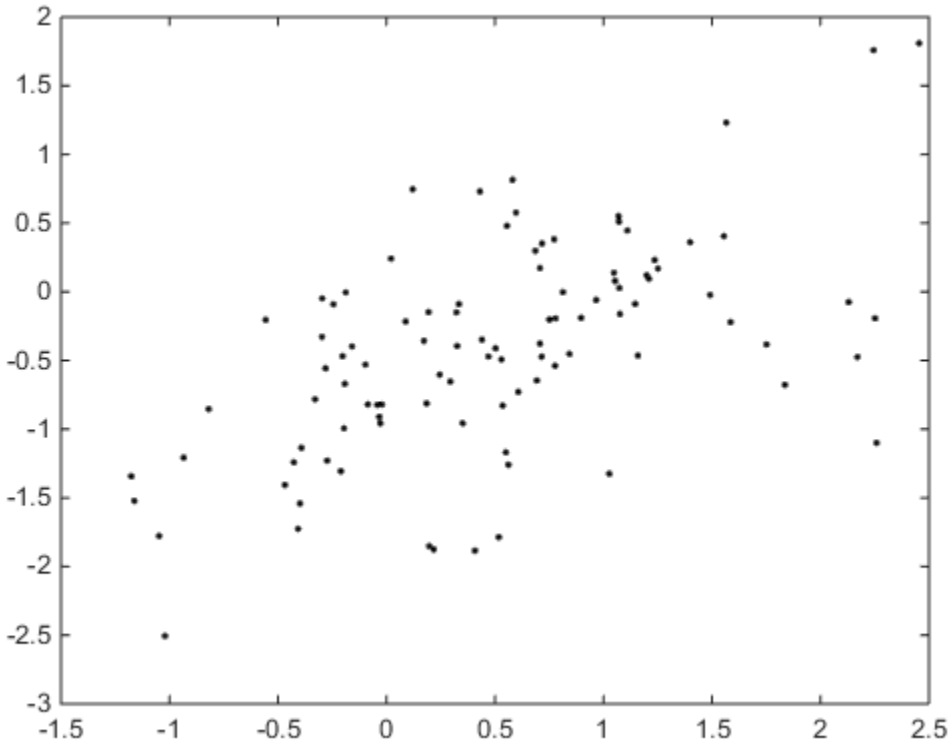
Homework #3

Problem 1

a. plot(XA(:,1),XA(:,2),'k.');



plot(XB(:,1),XB(:,2),'k.');



XA is clearly seperable, while XB is not.

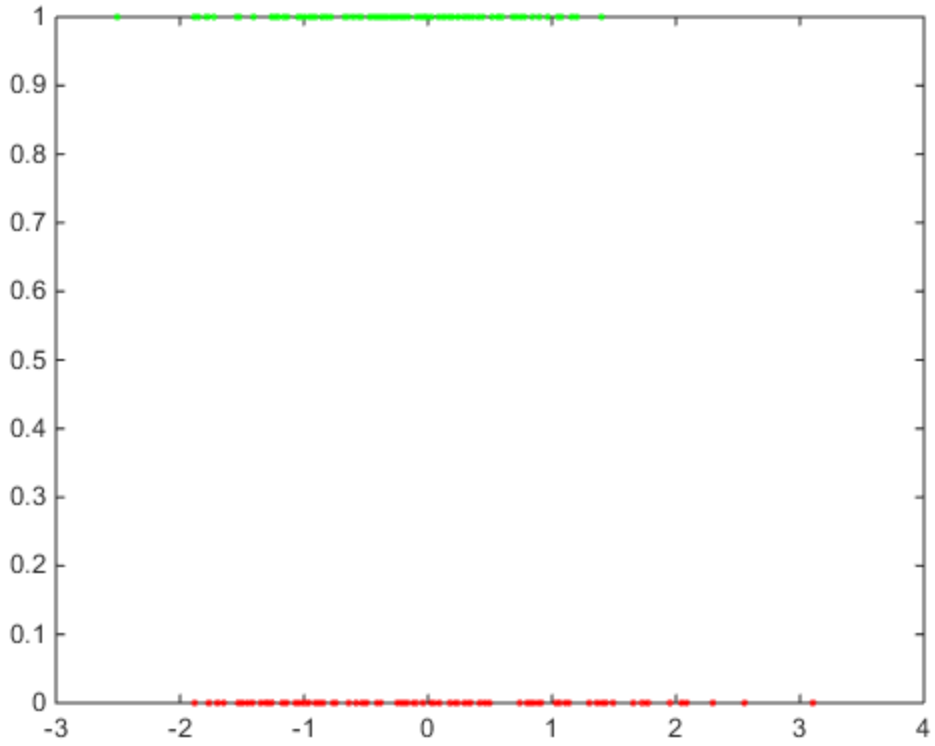
b.
```
function plot2DLinear(obj, X, Y)
  [n,d] = size(X);
  if (d~=2) error('Sorry -- plot2DLogistic only works on 2D data...'); end;

  %%% TODO: Fill in the rest of this function...

  class = unique(Y);
  X1 = find(
  X2 = X(:,2);
  plot(X1(Y == class(1,:)), class(1,:), 'r.');
  hold on;
  plot(X1(Y == class(2,:)), class(2,:), 'g.');
  plot(X2(Y == class(1,:)), class(1,:), 'r.');
  plot(X2(Y == class(2,:)), class(2,:), 'g.');
  hold off;
```

```
>> learner=logisticClassify2();
>> learner=setClasses(learner, unique(YA));
>> wts = [.5 1 -.25];
>> learner=setWeights(learner, wts);
```

```
>> plot2DLinear(learner, XA, YA)
```



>> plot2DLinear(learner, XB, YB)